UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Norfolk Division

CERTUSVIEW TECHNOLOGIES, LLC,

Plaintiff,

v. Civil No. 2:13cv346

S&N LOCATING SERVICES, LLC,
and
S&N COMMUNICATIONS, INC.,

Defendants.

OPINION AND ORDER

This matter is before the Court on a Motion for Judgment on the Pleadings filed on October 28, 2014 by S&N Communications, Inc., and S&N Locating Services, LLC (collectively "S&N" or "Defendants"). ECF No. 197. In such motion, Defendants contend that the claims of the patents asserted against them by CertusView Technologies, LLC ("CertusView" or "Plaintiff") are invalid for failure to claim patentable subject matter under 35 U.S.C. § 101. The parties' have filed a joint request for oral argument on this motion. Joint Notice Regarding Oral Argument, ECF No. 228. However, after examining the briefs and the record, the Court determines that oral argument is unnecessary because the facts and legal contentions are adequately presented and oral argument would not aid in the decisional process. Fed.

R. Civ. P. 78(b); E.D. Va. Loc. R. 7(J). For the reasons set forth below, the Court **GRANTS** Defendants' motion.[1]

I. FACTUAL AND PROCEDURAL BACKGROUND[2]

A. Locate Operations and the Patents-in-Suit

Plaintiff holds, inter alia, the five related patents, involving "technology for the prevention of damage to underground infrastructure," see First Am. Compl. ¶ 8, at issue in this action: U.S. Patent No. 8,290,204 ("the '204 patent"), U.S. Patent No. 8,407,001 ("the '001 patent"), U.S. Patent No. 8,340,359 ("the '359 patent"), U.S. Patent No. 8,265,344 ("the '344 patent"), and U.S. Patent No. 8,532,341 ("the '341 patent" and, collectively with the '204, '001, '359, and '344 patents, "the patents-in-suit").[3] "Underground man-made objects, such as

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[1] A Motion for Summary Judgment filed by Defendants on November 14, 2014 and a Motion for Summary Judgment on Anticipation and Certain Obviousness Arguments filed by Plaintiff on November 14, 2014 are also pending in this matter. As a result of the Court's November 20, 2014 Order, ECF No. 220, that vacated the deadlines in the Court's March 27, 2014 Rule 16(b) Scheduling Order, the parties have not fully-briefed such motions. However, the Court's resolution of Defendants' motion for judgment on the pleadings renders such motions moot. Accordingly, the Court will **DENY AS MOOT** both motions.

[2] For the purpose of deciding the motion currently before the Court, the facts of this case are drawn from Plaintiff's First Amended Complaint and are assumed true, with all reasonable inferences from those facts drawn in Plaintiff's favor. See Drager v. PLIVA USA, Inc., 741 F.3d 470, 474 (4th Cir. 2014) (citing Butler v. United States, 702 F.3d 749, 751 (4th Cir. 2012); Edwards v. City of Goldsboro, 178 F.3d 231, 244 (4th Cir. 1999)). The facts recited here are not to be considered factual findings for any purpose other than consideration of the pending motion.

[3] Plaintiff has attached the '204, '001, '359, '344, and '341 patents, respectively, as Exhibits A-E of the First Amended Compl.

utility lines and pipes . . . are very susceptible to damage from excavation activities." '001 patent at 1:18-20. Accordingly, local and federal regulations require persons who wish to excavate land to notify owners of underground facilities in the area in which such excavators wish to dig, the "dig area," prior to excavation. See id. at 1:20-23; '204 patent at 1:29-31. The underground facility owners must then determine whether they own or operate any underground facilities at the identified dig area. '204 patent at 1:31-33. To ascertain whether underground facilities are present at a dig area, facility owners must conduct a "locate operation." See id. at 1:33-39, 47-50. A "locate operation" is "the application of paint, flags, or some other marking object or material to indicate the presence of an underground facility." Joint Claim Constr. Chart at 2, ECF No. 101-2. A person performing a locate operation is a "locate technician." Id.

To conduct locate operations, underground facility owners may use in-house locate technicians or may hire "independent contract locating firms" to perform locate operations on their behalf. '204 patent at 1:53-55. Before conducting a locate operation, the locate technician receives a "locate ticket," that is, "the set of instructions necessary for a locate

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See ECF Nos. 55-1 to 55-2. Thus, as discussed below, the Court may consider such exhibits for the purposes of resolving this motion.

technician to perform a locate operation." Opinion and Order at 64, ECF No. 121; see '204 patent at 1:57-59. Such locate ticket may include "the address or description of the dig area to be marked, the day and/or time that the dig area is to be marked, and/or whether the user is to mark the dig area for telecommunications (e.g., telephone and/or cable television), power, gas, water, sewer, or some other underground facility." '204 patent at 1:59-64. At the dig area, the locate technician uses a "locate wand," a device that "use[s] a number of electronic methods to detect the presence of underground facilities," to determine whether underground facilities are present. Id. at 1:33-37. The locate technician then marks, "using paint or some other physical marking system, such as flags," the "[l]ocation of those underground facilities, if any, which exist in the dig area." Id. at 1:37-39. "Paint is generally applied as a sequence of dashes or dots on the surface . . . directly above the underground facility and is color-coded to indicate to the excavator the type . . . of the underground facility present." Id. at 1:39-44. Similarly, flags identifying the underground facility "can be placed in the ground directly above the underground facility being marked." Id. at 1:44-47. A locate technician dispenses "paint and/or flags . . . using various devices." Id. at 1:47-48. However, paint "is typically applied using a paint marking tool." '001

patent at 1:30-31. Such paint, flags, or other marking objects resulting from a locate operation are referred to as "locate marks." '204 patent at 1:50-52.

"It is generally recommended, or in some jurisdictions required, to document the type and number of underground facilities located, i.e. telephone, power, gas . . . etc., and the approximate geographic location of the locate marks." Id. at 1:65-67, 2:1. "Often times[,] it is also recommended or required to document the distance, or 'offset[,]' of the locate marks from environmental landmarks that exist at the dig area," such as trees, curbs, driveways, pedestals, and building structures, because such offsets "serve as evidence supporting the location of the locate marks after those locate marks may have been disturbed by the excavation process." Id. at 2:2-16.

The documentation containing "some or all of the information regarding a locate operation is often called a 'manifest.'" Id. at 2:17-18. "Currently, locate marks are generally documented using a sketching process which results in the creation of a paper manifest." Id. at 2:39-41.

> A manifest may typically contain a variety of information related to a locate operation including a sketch or drawing of the dig area that identifies the approximate location of the locate marks and environmental landmarks present at the dig area; the time and date the locate operation was performed; identification of the entity and the locate technician performing the locate operation; the entity requesting the locate operation; the geographic address of the

> dig area; the type of markings used for the locate operation (e.g., colored paint, flags, or other markers); notes from the locate technician; and/or a technician signature.

Id. at 2:18-29. Generally, if an in-house employee conducts the locate operation, the facility owner/operator will only document on the manifest "the existence of its underground facilities and the approximate location of its locate marks." Id. at 2:30-33. However, if multiple underground facility owners hire an independent contract locating firm to conduct the locate operation, such firm "may document on the manifest some or all of the underground facilities at the dig area that it located and the approximate location of all the locate marks." Id. at 2:33-38. Manifests "are stored manually or in some jurisdictions are digitally scanned/photographed and the image stored electronically." Id. at 2:43-45.

However, the locate operation process described above contains flaws. The sketching process that is generally used to document locate marks, through the creation of a paper manifest, can be problematic because "[s]ketches are produced by hand, are not to scale, prone to human error, and costly in drafting time spent by the locate technician." Id. at 2:39-43. "Inaccurate markings of the utility lines can result in physical damage to utility lines, property damage, and/or personal injury during the excavation process that, in turn, can expose the utility

line owner or contractor to significant legal liability." '001 patent at 1:34-37. In addition, locate operation documentation is suboptimal as manifests "are not easily interrogated for data in any mechanized way" "because the manifests are stored as paper or digital images." Id. at 2:45-47. According to Plaintiff, the inventors of the patents-in-suit "appreciated the need for new methods and systems to increase the accuracy and reliability of sketches." Pl.'s Opp'n to Mot. for J. on the Pleadings at 4, ECF No. 207. Thus, the technology claimed in the patents-in-suit purportedly solves some of the problems that locate technicians encountered in documenting locate operations.

1. The '204 Patent

The '204 patent is titled "Searchable Electronic Records of Underground Facility Locate Marking Operations." '204 patent at 1:1-3. In brief, the specification indicates that the '204 patent is "directed to methods, apparatus and systems for creating a searchable electronic record, or 'electronic manifest,' relating to a geographic area including a dig area to be excavated or otherwise disturbed," id. at 2:51-55, with part of such electronic record to include "the geographic location of one or more physical locate marks, applied to the dig area during a locate operation . . . somehow identified with respect to its immediate surroundings in the geographic area." Plaintiff has asserted that Defendants infringed Claims 1, 2,

19, and 21 of the '204 patent. See Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1, ECF No. 213.

Plaintiff asserts that Defendants infringed three of the method claims of the '204 patent, Claims 1, 2, and 19. Claim 1, an independent method claim, recites:

> A method for generating a searchable electronic record of a locate operation performed by a locate technician in a dig area, wherein at least a portion of the dig area is planned to be excavated or disturbed during excavation activities, the method comprising:
>
> A) electronically receiving source data representing at least one input image of a geographic area comprising the dig area;
>
> B) processing the source data so as to display at least a portion of the at least one input image on a display device;
>
> C) adding to the displayed at least one input image at least one digital representation of at least one physical locate mark so as to generate a marked-up image including the at least one digital representation of the at least one physical locate mark, the at least one physical locate mark applied to ground in the dig area by the locate technician during a locate operation comprising identifying, using the at least one physical locate mark, a presence or an absence of at least one underground facility within the dig area; and
>
> D) electronically transmitting and/or electronically storing information relating to the marked-up image information relating to the marked-up image so as to generate the searchable electronic record of the locate operation.

Id. at 34:52-67, 35:1-9. Claim 2 is dependent upon Claim 1 and recites: "The method of Claim 1, wherein C) comprises: adding, via a user input device associated with the display device, the at least one digital representation of the at least one physical

locate mark to the displayed at least one input image, so as to generate the marked-up image." Id. at 35:10-14. Claim 19 is dependent upon Claim 17, which, in turn, depends on Claim 1. Claim 19 recites: "The method of claim 17, wherein the at least one photographic image comprises one or more of a topographical image, a satellite image, and an aerial image." Id. at 36:4-6. Claim 17 recites: "The method of claim 1, wherein the at least one input image comprises at least one photographic image." Id. at 35:66-67.

In addition, Plaintiff asserts that Defendants infringed one apparatus claim in the '204 patent, Claim 21. Claim 21, an independent apparatus claim, recites:

> An apparatus for facilitating generation of a searchable electronic record of a locate operation performed by a locate technician in a dig area, wherein at least a portion of the dig area is planned to be excavated or disturbed during excavation activities, the apparatus comprising:
>
> a communication interface;
>
> a display device;
>
> a memory to store processor-executable instructions; and
>
> a processing unit coupled to the communication interface, the display device, and the memory, wherein upon execution of the processor-executable instructions by the processing unit, the processing unit:
>
> controls the communication interface to electronically receive source data representing at least one input image of a geographic area including the dig area;
>
> processes the source data and controls the display device so as to display at least a portion of the at least one input image;
>
> adds to the displayed at least one input image at

> least one digital representation of at least one physical locate mark so as to generate a marked-up image including the at least one digital representation of the at least one physical locate mark, the at least one physical locate mark applied to ground in the dig area by the locate technician during a locate operation comprising identifying, using the at least one physical locate mark, a presence or an absence of at least one underground facility within the dig area; and
> further controls the communication interface and/or the memory to electronically transmit and/or electronically store information relating to the marked-up image so as to generate the searchable electronic record of the locate operation.

Id. at 36:35-67.

2. The '344 Patent

The '344 Patent is titled "Electronic Manifest of Underground Facility Locate Operation." '344 patent at 1:1-3. Such patent is directed to methods and apparatus for generating a searchable electronic record of a locate operation. Plaintiff asserts that Defendants have infringed two apparatus claims of such patent, Claims 1 and 4, as well as two method claims of such patent, Claims 13 and 17. See Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1. Claim 1, an independent apparatus claim, recites:

> An apparatus for facilitating generation of a searchable electronic record of a locate operation performed by a locate technician in response to a locate ticket and in advance of planned excavation activities at a dig area identified by the locate ticket, the apparatus comprising:
> a communication interface;

a display device;
a memory to store processor-executable instructions; and
a processing unit coupled to the communication interface, the display device, and the memory, wherein upon execution of the processor-executable instructions by the processing unit, the processing unit:
controls the communication interface to electronically receive:
ticket information derived from the locate ticket, the ticket information including geographic information identifying the dig area, wherein at least a portion of the dig area may be excavated or disturbed during the planned excavation activities; and
an image of a geographic area including the dig area;
controls the display device to display at least a portion of the received image;
combines the electronically received image with image-related information so as to generate the searchable electronic record, the image-related information comprising:
a geographic location associated with the dig area;
a timestamp indicative of when the locate operation occurred, the locate operation comprising identifying, in advance of the planned excavation activities and using at least one physical locate mark applied to ground, pavement or other surface by the locate technician during the locate operation, a presence or an absence of the at least one underground facility within the dig area identified by the ticket information; and
at least one digital representation of the at least one physical locate mark applied to the ground, pavement or other surface by the locate technician during the locate operation; and
controls the communication interface and/or the memory to electronically transmit and/or electronically store the searchable

> electronic record of the locate operation so that performance of the locate operation is verifiable.

Id. at 17:40-67, 18:1-19. Claim 4 is an apparatus claim dependent upon Claim 1. Claim 4 recites: "The apparatus of [C]laim 1, wherein the image comprises an aerial image." Id. at 18:26-27. Claim 13 is an independent method claim that recites:

> A method for generating a searchable electronic record of a locate operation performed by a locate technician in response to a locate ticket and in advance of planned excavation activities at a dig area identified by the locate ticket, the method comprising:
>
> A) electronically receiving:
>
> A1) ticket information derived from the locate ticket, the ticket information including geographic information identifying the dig area, wherein at least a portion of the dig area may be excavated or disturbed during the planned excavation activities; and
>
> A2) an image of a geographic area comprising the dig area;
>
> B) combining the electronically received image with image-related information so as to generate the searchable electronic record, the image-related information comprising:
>
> a geographic location associated with the dig area;
>
> a timestamp indicative of when the locate operation occurred, the locate operation comprising identifying, in advance of the planned excavation activities and using at least one physical locate mark applied to ground, pavement or other surface by the locate technician during the locate operation, a presence or an absence of the at least one underground facility within the dig area identified by the ticket information; and
>
> at least one digital representation of the at least one physical locate mark applied to ground, pavement or other surface by the

> locate technician during the locate operation; and
>
> C) electronically transmitting and/or electronically storing the searchable electronic record of a locate operation so that performance of the location operation is verifiable.

Id. at 18:55-67, 19:1-21. Claim 17 is a method claim, dependent on Claim 13, that recites: "The method of claim 13, wherein the image comprises an aerial image." Id. at 19:30-31.

3. The '359 Patent

The '359 patent is titled "Electronic Manifest of Underground Facility Locate Marks." '359 patent at 1:1-2. Such patent claims methods and apparatus for generating a searchable electronic record of a locate operation. Plaintiff alleges that Defendants infringed one method claim of the '359 patent, Claim 1. See Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1. Claim 1, an independent method claim, recites:

> A method for generating a searchable electronic record of a locate operation performed by a locate technician, the locate operation comprising identifying, using at least one physical locate mark, a presence or an absence of at least one underground facility within a dig area, wherein at least a portion of the dig area may be excavated or disturbed during excavation activities, the method comprising:
>
> A) electronically receiving an aerial image of a geographic area comprising the dig area, at least a portion of the received aerial image being displayed on a display device;
>
> B) adding to the displayed aerial image at least one digital representation of the at least one physical locate mark, applied to ground, pavement or other surface by the locate technician during the locate operation, so as to generate a marked-up digital image including the at least one

> digital representation of the at least one physical locate mark; and
> C) electronically transmitting and/or electronically storing the searchable electronic record of the locate operation, wherein the searchable electronic record comprises the marked-up digital image and a data set, and wherein the data set comprises:
>
> a set of geographic points along a marking path of the at least one underground facility, the set of geographic points including geographical coordinates corresponding to the at least one physical locate mark;
> a property address associated with the at least one physical locate mark;
> a timestamp indicative of when the locate operation occurred;
> a name of the locate technician;
> a name of a company responsible for performing the locate operation; and
> a ticket number associated with the locate operation.

Id. at 17:53-67, 18:1-21.

4. The '341 Patent

The '341 patent is titled "Electronically Documenting Locate Operations for Underground Utilities." '341 patent at 1:1-3. The specification indicates that it is directed "to methods, apparatus and systems for creating a searchable electronic record, or 'electronic manifest,' relating to a geographic area including a dig area to be excavated or otherwise disturbed," with such electronic manifest including "the geographic location of one or more physical locate marks, applied to the dig area during a locate operation . . . ." Id. at 2:61-67. Plaintiff asserts that Defendants have infringed

five claims of such patent, Claims 1, 7, 16, 17, and 28. See Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1. Claim 1 is an independent method claim that recites:

> A method, comprising:
>
> A) performing a locate operation of at least one underground facility in a dig area that is planned to be excavated or disturbed during excavation activities by applying to ground, pavement or other surface in the dig area at least one physical colored marker to indicate a presence or an absence of the at least one underground facility below the ground, pavement or other surface in the dig area;
>
> B) displaying on a display device at least one digital image of a geographic area comprising the dig area;
>
> C) adding to the displayed digital image at least one electronic colored marker corresponding to the at least one physical colored marker applied to the ground, pavement or other surface in the dig area so as to generate a marked-up image including the at least one electronic colored marker; and
>
> D) electronically transmitting and/or electronically storing information relating to the marked-up image to document the locate operation performed in A).

Id. at 34:61-67, 35:1-15. Claim 7 is dependent on Claim 1 and recites:

> The method of claim 1, wherein B) comprises:
>
> B1) electronically receiving ticket information derived from a locate request ticket, the locate request ticket specifying the dig area and requesting performance of the locate operation; and
>
> B2) selecting the at least one digital image for display on the display device based at least in part on the ticket information received in B1).

Id. at 35:46-53. Claim 16 is an independent computer-readable

medium claim that recites:

> A computer-readable storage device encoded with instructions that, when executed by at least one processor, perform a method comprising:
>
> A) documenting a performance of a locate operation of at least one underground facility in a dig area that is planned to be excavated or disturbed during excavation activities, the locate operation comprising applying to ground, pavement or other surface in the dig area at least one physical colored marker to indicate a presence or an absence of the at least one underground facility below the ground, pavement or other surface in the dig area, wherein A) comprises:
>
> B) displaying on a display device at least one digital image of a geographic area comprising the dig area;
>
> C) adding to the displayed digital image at least one electronic colored marker corresponding to the at least one physical colored marker applied to the ground, pavement or other surface in the dig area so as to generate a marked-up image including the at least one electronic colored marker; and
>
> D) electronically transmitting and/or electronically storing information relating to the marked-up image.

Id. at 36:36-57. Claim 17 is also an independent apparatus claim and it recites:

> An apparatus comprising:
>
> a communication interface;
>
> a display device;
>
> a user input device;
>
> a memory to store processor-executable instructions; and
>
> a processing unit coupled to the communication interface, the display device, the user input device, and the memory, wherein upon execution of the processor-executable instructions by the processing unit, the processing unit:
>
> A) documents a performance of a locate operation of at least one underground

> facility in a dig area that is planned to be excavated or disturbed during excavation activities, the locate operation comprising applying to ground, pavement or other surface in the dig area at least one physical colored marker to indicate a presence or an absence of the at least one underground facility below the ground, pavement or other surface in the dig area, wherein in A), the processing unit:
> B) displays on the display device at least one digital image of a geographic area comprising the dig area;
> C) adds to the displayed digital image at least one electronic colored marker corresponding to the at least one physical colored marker applied to the ground, pavement or other surface in the dig area so as to generate a marked-up image including the at least one electronic colored marker; and
> D) electronically transmits and/or electronically stores information relating to the marked-up image.

Id. at 36:58-67, 37:1-20. Claim 28 is dependent on Claim 17 and it recites: "The apparatus of claim 17, wherein in D), the information relating to the marked-up image includes at least one timestamp indicative of a date and/or a time at which the locate operation is performed in A)." Id. at 38:47-50.

5. The '001 Patent

The '001 patent is titled "Systems and Methods for Using Location Data to Electronically Display Dispensing of Markers by a Marking System or Marking Tool." '001 patent at 1:1-4. Plaintiff alleges that Defendants have infringed Claim 1 of such patent. See Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1. Claim

1 is an independent system claim that recites:

> A system for electronically displaying information relating to use of a marking system or a marking tool configured to dispense one or more markers to mark, on ground, pavement, or other surface, a location of an underground utility, the system comprising:
>
> a processor to receive location data relating to the use of the marking system or the marking tool; and
>
> a display device communicatively coupled to the processor,
>
> wherein the processor uses the location data to control the display device so as to visually display a dispensing of the one or more markers that mark the location of the underground utility on an electronic representation of an area that is marked and includes the location of the underground utility.

Id. at 8:14-28.

B. Procedural History

On May 29, 2013, Plaintiff filed an action in this Court alleging that Defendants "have infringed, and continue to infringe, literally and/or under the doctrine of equivalents," four of the five patents-in-suit "by making, using, offering to sell, and/or selling devices and/or services covered by the claims of the [patents] and by actively and intentionally inducing others to infringe one or more claims of the [patents]." Compl. ¶¶ 14, 18, 22, 26, ECF No. 1. On December 6, 2013, Plaintiff filed an amended complaint, alleging infringement of all five patents-in-suit. See Am. Compl. ¶¶ 15, 19, 23, 27, 32, ECF No. 55. On December 23, 2013, Defendants filed an Answer denying Plaintiff's allegations of infringement.

Defs.' Answer at 6-10, ECF No. 61. Defendants deny any infringement, including induced or contributory, and allege various affirmative defenses, including the invalidity of the patents-in-suit. Id. at 11-12. Defendants also assert counterclaims against Plaintiff, seeking "declaratory judgment[s] of non-infringement . . . [and] invalidity" with regard to all five patents-in-suit. Id. at 15-20.

On April 1, 2014, the Court held a Markman hearing and heard argument from the parties concerning ten disputed claim terms. On May 16, 2014, the Court issued a claim construction Opinion and Order ("Markman Opinion and Order") construing such disputed claim terms. ECF No. 121. The Court determined that the following six disputed terms required no construction and should be accorded their plain and ordinary meaning: "generate/generating/generation of the searchable electronic record;" "processor/processing unit;" "display device;" "communication interface and/or the memory;" "electronically transmitting/transmit and/or electronically storing/store;" and "marking system or a marking tool." Markman Opinion and Order at 21, 28, 33, 37, 40, 68. The Court construed the remaining four disputed claim terms as follows:

> "location data" - "data that identifies a geographic location;"
>
> "information relating to the marked-up image" - "non-image data relating generally to a locate operation;"

> "searchable electronic record of a locate operation" - "one or more computer-readable files that include some or all of the information regarding a locate operation;" and
>
> "locate [request] ticket" - "the set of instructions necessary for a locate technician to perform a locate operation."

Id. at 44, 49-50, 58, 63-64.

On August 28, 2014, Defendants moved for an order requiring Plaintiff to limit the number of claims it has asserted against Defendants. Defs.' Renewed Mot. to Limit Number of Asserted Claims, ECF No. 140. On October 1, 2014, the Court granted, in part, Defendants' motion to limit claims and ordered Plaintiff to elect fifteen representative claims from the sixty-eight claims Plaintiff originally had asserted against Defendants. See Opinion and Order, ECF No. 159. Accordingly, Plaintiff has now reduced the number of patent claims asserted against Defendants to those stated above with respect to each of the patents-in-suit. Pl.'s Mem. Supp. Mot. for Summ. J. at 5 n.1; Defs.' Mem. Supp. Mot. for J. on the Pleadings at 2 & n.1, ECF No. 198. In addition, the Court ordered Defendants to elect a maximum of twenty-five prior art references to assert against Plaintiff. Opinion and Order, ECF No. 159.

On October 28, 2014, Defendants filed the instant motion for judgment on the pleadings. ECF No. 197. In support of such motion, Defendants contend that the patents-in-suit are invalid

because they do not claim patentable subject matter under 35 U.S.C. § 101. Defs.' Mem. Supp. Mot. for J. on the Pleadings at 8. According to Defendants, under the two-step test governing whether a patent impermissibly claims an abstract idea, set forth by the United States Supreme Court in Alice Corp. Pty. Ltd. v. CLS Bank International, 573 U.S. ___, 134 S. Ct. 2870 (2014), Plaintiff's patents are invalid because they attempt to claim an abstract idea and do not transform such idea into a patent-eligible invention. See id. at 11, 14. Under the first step, Defendants contend the patents-in-suit do not claim patentable subject matter because they merely purport to claim the abstract idea of "recording a locate operation." Id. at 11. Under the second step, in Defendants' view, the "generic hardware components" recited in the claims of the patents-in-suit do not transform the abstract idea of recording a locate operation into patent-eligible subject matter. Id. at 14. Additionally, in their brief, Defendants compare "an exemplary asserted method claim," Claim 1 of the '204 patent, to an alleged "conventional method of recording a locate operation" to demonstrate that such claim "does nothing more than add computerized terms . . . to the conventional practice of recording a locate operation." Id. at 3-4.

On November 13, 2014, CertusView filed its brief in opposition to Defendants' motion for judgment on the pleadings.

ECF No. 207. Plaintiff opposes Defendants' motion on both procedural and substantive grounds. Regarding procedure, Plaintiff contends that Defendants' motion improperly relies on material outside the pleadings, especially in describing a "conventional" locate operation. Pl.'s Opp'n to Mot. for J. on the Pleadings at 3. As corollaries to its contention that Defendants' motion for judgment on the pleadings is, in reality, a motion for summary judgment in disguise, Plaintiff asserts that Defendants' motion must fail because it lacks the factual support requisite for the Court to grant summary judgment to S&N and also constitutes an impermissible second motion for summary judgment in addition to Defendants' currently pending motion for summary judgment, ECF No. 216, under this Court's local rules. See id. at 16-17.

Regarding substance, Plaintiff begins by arguing that Defendants have failed to carry their burden of establishing the invalidity of the patents-in-suit by clear and convincing evidence because they have not provided a claim-by-claim analysis of the validity vel non of the patents-in-suit. Id. at 18. Next, CertusView contends that the patents-in-suit are patentable under the first part of the Alice test because they are not directed to the abstract idea of "recording a locate operation." Id. at 19-20. In Plaintiff's view, recording a locate operation is not an abstract idea because recording a

locate operations is, "necessarily, a real world operation" because the "patents do not describe any method for doing that automatically." Id. at 20. Also, Plaintiff underscores that the "application of paint, flags, or some other marking object or material to indicate the presence of an underground facility" is "a concrete process performed by a real person, in the real world." Id. at 19. As a further indication that the patents-in-suit do not attempt to claim an abstract idea, Plaintiff contends that the claims in the patents-in-suit do not preempt recording locate operations. Id. at 20-21. According to Plaintiff, the fact that the claims at issue "concern the performance of real world steps" indicates that the patents are not directed to an abstract idea. Id. at 21.

With respect to the second prong of Alice, CertusView contends that its patents are directed to patent-eligible subject matter because they are transformative. Plaintiff argues that "the use of an image or representation of a dig area is transformative" as an "inventive contribution" over the prior art, rather than merely a recitation of the conventional methods used to conduct locating operations. Id. at 22-23. Plaintiff also contends that, taken together, all the claim elements in each patent are patent-eligible because they provide a new and useful process in combination. Id. at 24. Moreover, according to Plaintiff, the patents-in-suit involve computerized

components that "play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly" because "no prior art systems contemplated the inventions of the asserted patents" and "it was necessary to include computerized elements" "to complete the invention that would allow locate technicians the ability to rely on an image or other electronic representations of a dig area when preparing a sketch or manifest." Id. at 24. Finally, CertusView asserts that courts which have invalidated patents that claimed abstract ideas have done so with respect to patents directed "to extremely broad and high-level concepts that presented a significant risk of preemption—unlike the situation here." Id. at 25.

On November 20, 2014, Defendants filed their reply to Plaintiff's brief in opposition to Defendants' motion. ECF No. 221. S&N's reply addresses both Certusview's procedural and substantive challenges to S&N's motion. Accordingly, this matter is now ripe for disposition.

II. STANDARD OF REVIEW

Federal Rule of Civil Procedure 12(c) governs motions for judgment on the pleadings. Such Rule provides: "[a]fter the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings." Fed. R. Civ. P. 12(c).

The Court of Appeals for the Fourth Circuit has noted:

> The standard for Rule 12(c) motions is the same as applied to Rule 12(b)(6) motions, which should only be granted if, "accepting all well-pleaded allegations in the plaintiff's complaint as true and drawing all reasonable factual inferences from those facts in the plaintiff's favor, it appears certain that the plaintiff cannot prove any set of facts in support of his claim entitling him to relief."

Priority Auto Grp., Inc. v. Ford Motor Co., 757 F.3d 137, 139 (4th Cir. 2014) (quoting Edwards v. City of Goldsboro, 178 F.3d 231, 244 (4th Cir. 1999)). "A Rule 12(c) motion tests only the sufficiency of the complaint and does not resolve the merits of the plaintiff's claims or any disputes of fact." Drager v. PLIVA USA, Inc., 741 F.3d 470, 474 (4th Cir. 2014) (citing Butler v. United States, 702 F.3d 749, 752 (4th Cir. 2012)).

Under Federal Rule of Civil Procedure 12(d), "[i]f on motion under 12(b)(6) or 12(c), matters outside the pleadings are presented to and not excluded by the court, the motion must be treated as one for summary judgment under Rule 56." A court has the discretion to either accept materials beyond the pleadings in considering a Rule 12(c) motion, thereby converting such motion into a motion for summary judgment, or to reject such materials and not consider them. See 2 James Wm. Moore et al., Moore's Federal Practice § 12.34[3][a] (3d ed. 2014); 5C Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, Federal Practice and Procedure § 1366 (3d ed. 2004 & Supp. 2014).

However, though a court may not consider matters outside the pleadings without converting a Rule 12(c) motion into a motion for summary judgment under Rule 56, "[a] copy of a written instrument that is an exhibit to a pleading is a part of the pleading for all purposes." Fed. R. Civ. P. 10(c).

III. DISCUSSION

Defendants contend that they are entitled to judgment as a matter of law on Plaintiff's patent infringement claims because Plaintiff's patents are invalid for failure to claim patent-eligible subject matter under 35 U.S.C. § 101. In response, Plaintiff has opposed Defendants' motion on both procedural and substantive grounds. Accordingly, first, the Court will consider Plaintiff's procedural challenges to determine whether it can reach the merits of Defendants' motion. As discussed below, the Court finds Plaintiff's procedural arguments unavailing. Therefore, the Court will then analyze the substance of Defendants' motion.

A. Procedural Issues

As an initial matter, the Court must consider whether Defendants' Rule 12(c) motion is a procedurally appropriate vehicle to attack the validity of Plaintiff's patents. The crux of Plaintiff's procedural challenge to Defendants' motion is that such motion improperly relies on material outside the pleadings and, therefore, must be considered a motion for

summary judgment. According to Plaintiff, as a summary judgment motion, Defendants' motion cannot be decided on the pleadings. Additionally, in Plaintiff's view, given that such motion is a motion for summary judgment, Defendants' motion must fail because it lacks sufficient factual support.

As the Court of Appeals for the Federal Circuit has recognized, "[s]ection 101 patent eligibility is a question of law . . . ." In re Roslin Inst. (Edinburgh), 750 F.3d 1333, 1335 (Fed. Cir. 2014) (citing Bancorp Servs., LLC v. Sun Life Assurance Co. of Can., 687 F.3d 1266, 1273 (Fed. Cir. 2012)). Nevertheless, "that legal conclusion 'may contain underlying factual issues.'" Loyalty Conversion Sys. Corp. v. Am. Airlines, Inc., ___ F. Supp. 2d ___, Case No. 2:13cv655, 2014 WL 4364848, at *4 (E.D. Tex. Sept. 3, 2014) (Bryson, Cir. J.) (quoting Accenture Global Servs., GmbH v. Guideware Software, Inc., 728 F.3d 1336, 1341 (Fed. Cir. 2013)). Thus, as a general matter, given that patent eligibility under section 101 is a question of law, the Court can resolve such issue on the pleadings, if the eligibility of the subject matter of the patents-in-suit does not involve an underlying factual dispute. Indeed, numerous courts have resolved whether a patent claims patent-eligible subject matter on a defendant's Rule 12(c) motion. See, e.g., buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1352 (Fed. Cir. 2014); Amdocs (Isr.) Ltd. v. Openet

Telecom, Inc., ___ F. Supp. 3d ___, No. 1:10cv910, 2014 WL 5430956, at *1 (E.D. Va. Oct. 24, 2014); Loyalty Conversion, 2014 WL 4364848, at *4. That said, the Federal Circuit has indicated that, although "claim construction is not an inviolable prerequisite to a validity determination under § 101," "it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter." Bancorp, 687 F.3d at 1273-74.

Contrary to Plaintiff's contention, the Court finds that it is appropriate at this juncture of the proceedings for the Court to ascertain, based solely on the pleadings, whether the patents-in-suit claim patent-eligible subject matter. Section 101 eligibility is a question of law, Roslin Inst., 750 F.3d at 1335, that hinges on the claims of the patents-in-suit, see Alice, 134 S. Ct. at 2355 (indicating that the Court's section 101 analysis involves two steps, both of which require a consideration of the patent claims at issue). Here, Plaintiff has attached the specifications of the patents-in-suit as exhibits to the First Amended Complaint and, therefore, pursuant to Rule 10(c), the Court may consider such specifications in resolving this Rule 12(c) motion. Accordingly, to resolve the claim-centric issue of section 101 validity, the Court finds

that it need not rely on any factual matter other than that presented in the specifications of the patents-in-suit themselves. Moreover, the Court already has resolved the parties' claim construction disputes through its Markman Opinion and Order and now has a "full understanding of the basic character of the claimed subject matter." Bancorp, 687 F.3d at 1273-74; see also Loyalty Conversion, 2014 WL 4364848, at *4. Therefore, for those reasons, the Court rejects Plaintiff's contention that the Court cannot resolve this motion on the pleadings.

Importantly, the Court further concludes that there are no factual disputes that could affect the Court's analysis of the issue of section 101 validity. The only factual dispute that Plaintiff has brought to the Court's attention in opposition to Defendants' motion concerns Defendants' characterization of a "conventional" locate operation, including Defendants' chart comparing such an operation to Claim 1 of the '204 patent. See Pl.'s Opp'n to Motion for J. on the Pleadings at 15. However, the Court need not resolve the factual dispute between the parties over how locate technicians conduct "conventional" locate operations because that dispute does not affect the Court's conclusion that the patents-in-suit do not claim patent-eligible subject matter. Therefore, the Court will decline to exercise its discretion to consider matters outside the

pleadings in resolving this Rule 12(c) motion. See Fed. R. Civ. P. 12(d).[4] The Court finds that such decision is appropriate because the issue of section 101 validity is adequately presented—and the Court can adequately resolve it—without considering the disputed facts outside the pleadings. To the extent that Defendants' briefs rely on factual information outside the pleadings, including the chart contained in Defendant's memorandum in support of its motion, the Court will not consider such materials in resolving this motion.[5] Rather, to the extent the Court considers the matter at all, the Court will view the facts regarding such "conventional" locate operations in the light most favorable to the Plaintiff based on the facts presented in Plaintiff's pleadings and the specifications of the patents-in-suit that Plaintiff has incorporated therein. Accordingly, given the absence of any other factual dispute that could affect this Court's ruling, the

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[4] Having declined, under Rule 12(d), to convert Defendants' Rule 12(c) motion into a Rule 56 motion, the Court need not consider Plaintiff's argument that Defendants violated this District's Local Rules by filing two Rule 56 motions.

[5] Although, to determine how locate technicians conduct "conventional" locate operations, the Court has not considered the chart in Defendants' memorandum in support of their motion, the Court notes that the specifications of the patents-in-suit contain descriptions of the traditional process of conducting a locate operation. '204 patent at 1:26-67, 2:1-47; '359 patent at 1:15-67, 2:1-44; '344 patent at 1:15-67, 2:1-36; '341 patent at 1:36-67, 2:1-57; '001 patent at 1:18-47. Thus, the Court may consider those descriptions because such specifications are attached to Plaintiff's First Amended Complaint as exhibits and are part of the pleadings. Fed. R. Civ. P. 10(c).

Court concludes that it is appropriate to resolve the issue of section 101 validity under Rule 12(c). See, e.g., Loyalty Conversion, 2014 WL 4364848, at *4.

B. The Validity of the Patents-in-Suit

Having concluded that it is appropriate for the Court to resolve, under Rule 12(c), whether the patents-in-suit claim patent-eligible subject matter, the Court will now consider the substance of Defendants' motion. The Court will begin with a discussion of patent eligibility under 35 U.S.C. § 101 and Alice. Thereafter, the Court will assess, in turn, whether each of the asserted claims of the patents-in-suit merely claim an abstract idea, rendering such claims invalid and indicating that it is "certain" that Plaintiff "cannot prove any set of facts in support of [its] claim entitling [it] to relief." See Priority Auto, 757 F.3d at 139.

1. Patent-Eligible Subject Matter

The Intellectual Property Clause of the United States Constitution empowers Congress "[t]o promote the progress of science and the useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." U.S. Const. art. I, § 8. Pursuant to such authority, Congress has defined the subject matter eligible for patent protection by providing that "[w]hoever invents or discovers any new and useful process, machine,

manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. However, as the Supreme Court reiterated in Alice, "'[w]e have long held that this provision contains an implicit exception: [l]aws of nature, natural phenomena, and abstract ideas are not patentable.'" 134 S. Ct. at 2354 (quoting Ass'n for Molecular Pathology v. Myriad Genetics, 569 U.S. ___, 133 S. Ct. 2107, 2116 (2013)). In explaining such exception, the Court has noted:

> [w]e have described the concern that drives this exclusionary principle as one of pre-emption. Laws of nature, natural phenomena, and abstract ideas are the basic tools of scientific and technological work. Monopolization of those tools through the grant of a patent might tend to impede innovation more than it would tend to promote it, thereby thwarting the primary object of the patent laws. We have repeatedly emphasized this . . . concern that patent law not inhibit further discovery by improperly tying up the future use of these building blocks of human ingenuity.
>
> At the same time, we tread carefully in construing this exclusionary principle lest it swallow all of patent law. At some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas. . . .
>
> Accordingly, in applying the § 101 exception, we must distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more, thereby transforming them into a patent-eligible invention. The former would risk disproportionately tying up the use of the underlying ideas, and are therefore ineligible for patent protection. The latter pose no

> comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.

Alice, 134 S. Ct. at 2354-55 (internal citations and quotation marks omitted). Accordingly, with those preemption principles in mind, an invention claims patent-eligible subject matter if it is directed to a "process, machine, manufacture, or composition of matter" and does not constitute an attempt to patent a law of nature, natural phenomenon, or abstract idea.

Congress has established that the burden of demonstrating that a patent claims ineligible subject matter lies with the party challenging validity. Under 35 U.S.C. § 282,

> [a] patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

35 U.S.C. § 282. In addition, "'[a] party seeking to establish that particular claims are invalid must overcome the presumption of validity in 35 U.S.C. § 282 by clear and convincing evidence.'" Nystrom v. TREX Co., 424 F.3d 1136, 1149 (Fed. Cir. 2005) (quoting State Contracting & Eng'g Corp. v. Condotte Am., Inc., 346 F.3d 1057, 1067 (Fed. Cir. 2003)); see also, e.g., Wolf v. Capstone Photography, Inc., 2:13-cv-09573, 2014 U.S. Dist. LEXIS 156527, at *12-13 (C.D. Cal. Oct. 28, 2014)

(citations omitted).[6] The Fourth Circuit has established the following standard regarding "clear and convincing evidence:"

> "[C]lear and convincing has been defined as evidence of such weight that it produces in the mind of the trier of fact a firm belief or conviction, without hesitancy, as to the truth of the allegations sought to be established, and, as well, as evidence that proves the facts at issue to be highly probable."

United States v. Hall, 664 F.3d 456, 461-62 (4th Cir. 2012) (alteration in original) (quoting Jimenez v. DaimlerChrysler Corp., 269 F.3d 439, 450 (4th Cir. 2001)).

To determine whether the patents-in-suit claim patent-eligible subject matter, the Court must apply the two-step framework that the Supreme Court set forth in Alice. First, the Court must "determine whether the claims at issue are directed to one of [the] patent-ineligible concepts," that is, laws of

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[6] The Court notes that other courts have suggested that it is inappropriate to require a party challenging the validity of a patent for failure to claim patent-eligible subject matter to prove such invalidity by clear and convincing evidence and that the Supreme Court's recent cases on this issue have not stated whether the presumption applied. E.g., Ultramercial, Inc. v. Hulu, LLC, __ F.3d ___, No. 2010-1544, 2014 WL 5904902, at *9-10 (Fed. Cir. Nov. 14, 2014) (Mayer, J., concurring) (stating that "[a]lthough the Supreme Court has taken up several section 101 cases in recent years, it has never mentioned—much less applied—any presumption of eligibility. The reasonable inference, therefore, is that while a presumption of validity attaches in many contexts, . . . no equivalent presumption of eligibility applies in the section 101 calculus."). While the Court recognizes the persuasiveness of such reasoning, the Court is duty-bound to apply the law as enacted by Congress and signed by the President, and in light of the Federal Circuit's interpretation thereof. Defendants have not presented any authority indicating that the presumption of validity no longer applies to challenges to a patent's validity under section 101. Accordingly, the Court concludes that Defendants must show, by clear and convincing evidence, that the patents-in-suit claim patent-ineligible subject matter.

nature, natural phenomena, and abstract ideas. Alice, 134 S. Ct. at 2355 (citing Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. ___, 132 S. Ct. 1289, 1296-97 (2012)). To determine whether a claim is directed to a patent-ineligible abstract idea, "a court must evaluate the claims '[o]n their face' to determine to which 'concept' the claims are 'drawn.'" Amdocs, 2014 WL 5430956, at *2 (quoting Alice, 134 S. Ct. at 2356) (citing Bilski v. Kappos, 561 U.S. 593, 609 (2010)). In other words, a court "must identify the purpose of the claim . . . what the claimed invention is trying to achieve . . . and ask whether the purpose is abstract." Cal. Inst. of Tech. v. Hughes Commc'ns Inc., ___ F. Supp. 3d ___, No. 2:13cv07245, 2014 WL 5661290, at *13 (C.D. Cal. Nov. 3, 2014).

Importantly, though the Supreme Court has not "delimit[ed] the precise contours of the 'abstract ideas' category" of patent ineligible subject matter, Alice, 134 S. Ct. at 2357, the Court has indicated that such category is not limited simply to "preexisting, fundamental truth[s] that exist in principle apart from any human action," id. at 2356 (alteration in original) (citation and internal quotation marks omitted). Indeed, the Supreme Court has suggested that a "method of organizing human activity" or "fundamental economic practice" can fall within the patent-ineligible category of abstract ideas. See id. Furthermore, the Federal Circuit has rejected the notion that

"the addition of merely novel or non-routine components to the claimed idea necessarily turns an abstraction into something concrete." Ultramercial, 2014 WL 5904902, at *4. At step one, prior art plays no role in a court's analysis. See, e.g., Enfish, LLC v. Microsoft Corp., No. 2:12-cv-07360-MRP-MRW, 2014 WL 5661456, at *4-5 (C.D. Cal. Nov. 3, 2014). But see McRO, Inc. v. Valve Corp., No. SACV 13-1874-GW(FFMx), 2014 WL 4772200, at *9 (C.D. Cal. Sept. 22, 2014) (unpublished).

If an invention is directed toward a patent-ineligible abstract idea, second, the Court must "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent eligible application." Alice, 134 S. Ct. at 2355 (quoting Mayo, 132 S. Ct. at 1297-98). Those additional elements "must be more than 'well-understood, routine, conventional activity.'" Ultramercial, 2014 WL 5904902, at *5 (quoting Mayo, 132 S. Ct. at 1298). This second step is "a search for an 'inventive concept'—i.e., an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" Id. (alteration and emphasis in original) (quoting Mayo, 132 S. Ct. at 1294). Yet, "transformation into a patent-eligible application requires 'more than simply stat[ing] the [abstract idea] while adding the

words 'apply it.'" Alice, 134 S. Ct. at 2357 (alterations in original) (quoting Mayo, 132 S. Ct. at 1294). Moreover, "the prohibition against patenting abstract ideas 'cannot be circumvented by attempting to limit the use of the formula to a particular technological environment' or adding 'insignificant postsolution activity,'" Bilski, 561 U.S. at 610-11 (quoting Diamond v. Diehr, 450 U.S. 175, 191-92 (1981)), and the narrowness of an abstract idea does not render patentable an otherwise patent-ineligible idea, see buySAFE, 765 F.3d at 1353 (citing Mayo, 132 S. Ct. at 1303). Nor does "the mere recitation of a generic computer . . . transform a patent-ineligible abstract idea into a patent-eligible invention."[7] Alice, 134 S. Ct. at 2358.

2. The Validity of the Patents-in-Suit

The Court will now consider whether each of the patents-in-suit claims patent-eligible subject matter under the two-step Alice framework stated above. However, before analyzing each of Plaintiff's asserted claims, the Court will address Plaintiff's contention that the Court should deny Defendants' motion because Defendants have failed to challenge the validity of the patents-

[7] In addition, the "machine-or-transformation" test, under which a court determines whether a process "is tied to a particular machine or apparatus" or "transforms a particular article into a different state or thing," "is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101." Bilski, 561 U.S. at 602, 604 (citations and internal quotation marks omitted).

in-suit claim-by-claim. See Pl.'s Opp'n to Mot. for J. on the Pleadings at 18-19. Plaintiff correctly notes that Alice requires the Court to address the elements of the asserted claims in the patents-in-suit both individually and as an ordered combination. However, Plaintiff overlooks the fact that the Alice Court itself considered only a representative claim to determine the validity of all of the claims at issue. See Alice, 132 S. Ct. at 2352 n.2. Other courts have also considered the validity of multiple patent claims based on a representative claim. E.g., Ultramercial, 2014 WL 5904902, at *1-2; Amdocs, 2014 WL 5430956, at *5. Therefore, to the extent it is permissible to challenge the validity of multiple patent claims under section 101 through an analysis of a representative claim, the Court rejects Plaintiff's contention regarding Defendants' failure to present a claim-by-claim analysis of the patents-in-suit. See Wolf, 2014 U.S. Dist. LEXIS 156527, at *30-31 n.3.

a. The '204 Patent

i. Claims 1, 2, 19, and 21 Claim an Abstract Idea

Under the first step in Alice, the Court finds that Claims 1, 2, 19, and 21 of the '204 patent are directed to the abstract idea of creating computer-readable files to store information, as applied in the particular technological environment of conducting a locate operation. Claim 1 of the patent is

directed at a method for generating a "searchable electronic record of a locate operation," that is, "one or more computer-readable files that include some or all of the information regarding a locate operation," Markman Opinion and Order at 58, "performed by a locate technician in a dig area, wherein at least a portion of the dig area is planned to be excavated . . . ." '204 patent at 34:52-56. At their core, the elements of Claim 1 involve: A) electronically receiving information, to include an image of the dig area; B) displaying such information, including the image, on a display device; C) adding a digital representation of physical locate marks to the image; and D) electronically transmitting and/or storing non-image data relating generally to a locate operation to create a computer-readable file including information related to a locate operation. Those elements embrace the abstract process of taking input information, in the form of an image; displaying it; adding additional information to it—the representation of the physical locate marks; and storing such information in a computer readable file, as applied in the particular technological environment of conducting locate operations. The mere fact that Claim 1 involves information specific to a locate operation does not, without more, alter the Court's conclusion that it is directed towards an abstract idea because "the prohibition against patenting abstract ideas 'cannot be

circumvented by attempting to limit the use of the formula to a particular technological environment' . . . ." Bilski, 561 U.S. at 610 (quoting Diehr, 450 U.S. at 191-92)). Accordingly, the Court concludes that Claim 1 is directed to an abstract idea.

The Court also determines that the other asserted method claims, Claims 2 and 19, are directed at the abstract idea of creating computer-readable files to store information, as applied in the particular technological environment of locate operations. Such claims are dependent on Claim 1 and do not limit the application of the idea in Claim 1 in such a manner as to alter the Court's analysis stated above. Claim 2 simply limits element C in Claim 1 to require the use of a "user input device" to add the physical locate marks to the input image. '204 patent at 35:10-14. The manner in which the locate mark information is added to the image does not alter the fact that the purpose of the method in Claim 2 is to take information in the form of an input image, display that information on a display device, add more information to it in the form of a representation of a physical locate mark, and then electronically transmit and/or store non-image data relating generally to a locate operation to create a computer readable file that stores that information. Likewise, Claim 19 is directed to the same abstract idea as Claim 1. Claim 19, in conjunction with Claim 17, limits Claim 1 to require that the

input image in Claim 1 comprise a photographic image, such photographic image comprising "one or more of a topographical image, a satellite image, and an aerial image." See id. at 35:66-67, 36:4-6. In other words, Claim 19 limits the claimed invention by limiting the type of information that is displayed on the display device, to which the information regarding the representation of the locate marks is added, and that is ultimately included in the computer-readable file. However, the alteration of the initial input information into the display device does not alter the Court's conclusion that Claim 19 is directed at the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of locate operations.

In addition, the asserted apparatus claim of the '204 patent, Claim 21, is directed to the same abstract idea to which Claim 1 is directed because Claim 21 is indistinguishable, in substance, from Claim 1. The Supreme Court has "long 'warn[ed] . . . against' interpreting § 101 'in ways that make patent eligibility depend simply on the draftsman's art.'" Alice, 134 S. Ct. at 2360 (alteration in original) (quoting Mayo, 132 S. Ct. at 1294). Put simply, a system or medium claim can be treated the same as a method claim where there is no "material difference" between the categories of claims. Bancorp, 687 F.3d at 1277; see also Accenture, 728 F.3d at 1341 (citing CLS Bank

Int'l v. Alice Corp., 717 F.3d 1269, 1274 n. 1 (Fed. Cir. 2013) (en banc), aff'd, 134 S. Ct. 2347 (2014)) (noting that a majority of the Federal Circuit sitting en banc, though in different opinions, has held that "system claims that closely track method claims and are grounded by the same meaningful limitations will generally rise and fall together."). Thus, the Alice Court held that system claims were patent-ineligible because they merely "recite[d] a handful of generic computer components configured to implement the same idea" as the abstract idea implemented on a generic computer stated in the patent's method claims. See 134 S. Ct. at 2360. Here, in substance, Claim 21 is identical to Claim 1. Claim 1 recites a method for performing the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations. Similarly, Claim 21 simply recites "a handful of generic computer components configured to implement the same idea," namely a "communication interface," "display device," "memory to store processor executable instructions," and a "processing unit coupled to" such other components that through "processor-executable instructions by the processing unit" cause the processing unit to facilitate the performance of elements A-D of the method stated in Claim 1. Therefore, the Court concludes that Claim 21 purports to claim the abstract idea of creating a

computer-readable file to store information, as applied in the particular technological environment of conducting locate operations, because it is an apparatus claim that merely involves a configuration of generic computer components to execute the abstract idea stated in Claim 1. See Alice, 134 S. Ct. at 2360.[8]

ii. Claims 1, 2, 19, and 21 Do Not Transform the Abstract Idea to Which They Are Directed

As indicated above, given that Claims 1, 2, 19, and 21 of the '204 patent are directed towards an abstract idea, to claim patent-eligible subject matter under step two of the Alice framework, they must "contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application" by including "additional features to ensure that the claim is more than a drafting effort designed to monopolize the abstract idea." 134 S. Ct. at 2357 (internal quotation marks, alterations, and citations omitted). Plaintiff has not directed a significant portion of its brief in opposition to Defendants' motion to an analysis of the extent to which the

[8] See also Joao Bock Transaction Sys. LLC v. Jack Henry & Assocs., Inc., Civ. No. 12-1138-SLR, 2014 WL 7149400, at *8 (D. Del. Dec. 15, 2014) (unpublished) (second and third alterations in original) (quoting CLS Bank, 717 F.3d at 1289) (stating that "[t]he fact that the asserted claims are apparatus claims, not method claims, does not change the court's analysis. Indeed, if that were the case, then 'applying a presumptively different approach to system [or apparatus] claims generally would reward precisely the type of clever claim drafting that the Supreme Court has repeatedly instructed [the Court] to ignore.'").

elements of the claims of the patents-in-suit transform such claims into patent-eligible subject matter; however, Plaintiff's primary argument is that the use of an image or electronic representation of a dig area is a transformative additional feature that renders the claims of the patents-in-suit patent-eligible. See Pl.'s Opp'n to Mot. for J. on the Pleadings at 24. In addition, Plaintiff contends that the computerized components in such claims necessarily were required "to complete the invention that would allow locate technicians the ability to rely on an image or other electronic representation of a dig area when preparing a sketch or manifest," and, therefore, that those components "play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly." Id. at 26. Notwithstanding those arguments, as discussed below, the asserted claims of the '204 patent do not amount to significantly more than a patent upon the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations.

Claim 1 lacks an "inventive concept" sufficient to transform such claim into a patent-eligible application of the abstract idea it claims, rather than simply an attempt to claim such abstract idea. As the Supreme Court has noted, "[g]iven

the ubiquity of computers, wholly generic computer implementation is not generally the sort of 'additional featur[e]' that provides any 'practical assurance that the [claimed] process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" Alice, 134 S. Ct. at 2358 (second and fourth alterations in original) (quoting Mayo, 132 S. Ct. at 1297). Element A of Claim 1 recites the generic step of "electronically receiving source data representing at least one input image of a geographic area comprising the dig area," yet, electronic receipt of data is far from an innovative additional feature. See, e.g., Ultramercial, 2014 WL 5904902, at *1, *5 (indicating that the element of receiving media products comprised of text data, music data, and video data was part of routine, conventional activity in implementing an abstract idea); Amdocs, 2014 WL 5430956, at *11 (finding that collecting data communication usage information was a conventional action for a computer); cf. buySAFE, 765 F.3d at 1355 (finding that a computer receiving and sending information over a network with no further specification was "not even arguably inventive"). Similarly, element B does not supply the needed innovative additional feature to prevent Claim 1 from claiming an abstract idea because it simply involves using generic computer components to perform the conventional computer function of processing data to display an input image on a

display device. See, e.g., DietGoal Innovations LLC v. Bravo Media LLC, ___ F. Supp. 2d ___, No. 13 Civ. 8391 (PAE), 2014 WL 3582914, at *13 (S.D.N.Y. July 8, 2014) (finding that "displaying [] results on a visual display" amounted to a conventional computer task); Intellectual Ventures I, LLC v. Capital One Fin. Corp., Civil Action No. 1:13-cv-00740 (AJT/TRJ), 2014 WL 1513273, at *2-3 (E.D. Va. Apr. 16, 2014) (implicitly finding that the element of "displaying the data stream via an interactive interface" did not establish that the implementation of an abstract idea rendered it patent-eligible). The generic limitation in element C of "adding to the displayed at least one input image at least one digital representation of at least one physical locate mark so as to generate a marked-up image" including such digital representation is also far from a transformative concept because it only involves a generic computerization of the traditional process of manually "identif[ying] the approximate location of the locate marks . . . present at the dig area" on a "sketch or drawing of the dig area," as indicated in the '204 patent's specification. See '204 patent at 2:17-22; Wolf, 2014 U.S. Dist. LEXIS 156527, at *35 (finding that the elements of a claim did not transform the abstract idea to which the claim was directed because "taken individually and as a whole, the independent claims [did] nothing more than recite a series of conventional steps carried

out using basic camera and computer functions and mostly essential to placing searchable event photographs online for inspection and ordering," the abstract idea to which those patents were directed).

The fourth element of Claim 1, element D, also lacks an innovative concept sufficient to transform such claim into a patent-eligible application of an abstract idea because it simply recites the use of common computer components, performing generic computer functions, to accomplish via such components what persons in the locate operations industry had traditionally done by hand: creating manifests to document information regarding a locate operation. The "electronic transmi[ssion]" and "electronic storage" of information to create a "searchable electronic record of a locate operation," '204 patent at 35:6-9, that is, a "computer readable file that includes some or all of the information regarding a locate operation," Markman Opinion & Order at 58, is tantamount to using computer components to perform their conventional functions, as applied in the locate operations industry. See Alice, 134 S. Ct. at 2359 (noting that "electronic recordkeeping [is] one of the most basic functions of a computer" and is a "purely conventional" use of a computer); buySAFE, 765 F.3d at 1355 (finding that using a computer to send and receive information over a network without any further specification was "not even arguably inventive").

Indeed, element D is akin to the computerization of the conventional process of storing hand-sketched paper manifests that contain "a variety of information related to a locate operation." See '204 patent at 2:17-47. Consequently, none of the individual elements of Claim 1 transform such claim into patent-eligible subject matter.

Furthermore, considered as an ordered combination of elements, Claim 1 does not sufficiently transform the subject matter claimed to permit Plaintiff to obtain a patent over the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations. There can be no doubt that Alice established that "a claim directed at an abstract idea does not move into section 101 eligibility territory by 'merely requiring generic computer implementation.'" buySAFE, 765 F.3d at 1354 (quoting Alice, 134 S. Ct. at 2357). As stated above, conventionally, locate operations have typically been documented by hand through creating manifests that include sketches or drawings of the dig area that indicate the approximate location of locate marks and that are stored manually "and/or digitally scanned/photographed and the image stored electronically." See '204 patent at 1:65-67, 2:1-47. As an ordered combination, Claim 1 basically recites a method for using generic computer components to

perform that same conventional documentation process.[9] Accordingly, Claim 1 does not claim patent-eligible subject matter under Alice because it merely recites the generic computer implementation of the traditional process of documenting a locate operation.[10] The elements of Claim 1, both individually and as a combination, do not transform it from an

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[9] The Court notes that the description of the claimed invention in the specification includes detail absent in the claims of the '204 patent that might suggest that the elements of the asserted claims in the '204 patent are more than just an attempt to claim an abstract idea. However, the Court's analysis of patentability under section 101 involves the elements of the asserted claims as they are written, rather than with the supplementation of detail added in the specification. See Accenture, 728 F.3d at 1345 (finding that "the complexity of the implementing software or the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method.").

[10] See Intellectual Ventures I LLC v. Mfrs. & Traders Trust Co., ___ F. Supp. 3d ___, Civ. No. 13-1274-SLR, 2014 WL 7215193, at *10 (D. Del. Dec. 18, 2014) (finding that the elements of obtaining hard-copy images from different sources, organized into groups, scanning such images, categorizing such images, storing such images, and producing products with such images failed to transform a method claim because such elements merely "'computerize[d]' a known idea for organizing images"); cf. Content Extraction & Transmission LLC v. Wells Fargo Bank, ___ F.3d ___, Nos. 2013-1588, -1589, 2014-112, -1687, 2014 WL 7272219, at *3-4 (Fed. Cir. Dec. 23, 2014) (holding that, under Alice step two, the asserted patents contained no limitations that transformed the claims into patent-eligible applications because the plaintiff's claims "merely recite the use of [] existing scanning and processing technology to recognize and store data from specific data fields such as amounts, addresses and dates. There is no 'inventive concept' in [the plaintiff's] use of a generic scanner and computer to perform well-understood, routine, and conventional activities commonly used in the industry. At most, [the plaintiff's] claims attempt to limit the abstract idea of recognizing and storing information from hard copy documents using a scanner and a computer to a particular technological environment. Such limitation has been held insufficient to save a claim in this context."); Cal. Inst. of Tech., 2014 WL 5661290, at *16 (noting that in the Alice step two analysis, it was "highly relevant" "that humans engaged in the same activity long before the invention of computers").

attempt to claim the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations.[11] Thus, the Court finds that Defendants have shown by clear and convincing evidence that Claim 1 of the '204 patent is invalid under 35 U.S.C. § 101 and, therefore, the Court will **GRANT** Defendants' motion as to Claim 1.

For the same reason that Claim 1 fails to transform the abstract idea to which it is directed, Claim 21 also fails to claim patent-eligible subject matter. As stated above, Claim 21 is identical to Claim 1 in substance because it only recites generic computer components configured to implement the method in Claim 1. Accordingly, to the extent that Defendants have shown by clear and convincing evidence that Claim 1 fails to claim patent-eligible subject matter, they have made the same showing with respect to Claim 21. See Alice, 134 S. Ct. at

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[11] That Claim 1—or any of Plaintiff's other asserted claims—fails to claim patent-eligible subject matter does not detract from the value of the method that Plaintiff attempted to claim or the transformative effect of such method on the locate operations industry. However, this Court does not inquire into the value or effect of the claimed invention to determine whether such invention is patent-eligible. Even if the invention claimed represents the development of a new process that solves a problem existing in the art, that, alone, does not render it patent eligible. See Amdocs, 2014 WL 5430956, at *11. With regard to patents that attempt to claim an abstract idea, the Court does not consider the extent to which the patents claiming such idea transform the field to which they pertain. That an abstract idea is transformative does not render it patent-eligible. Rather, the Court considers whether the elements of the patent claims at issue transform the abstract idea itself.

2360. Thus, the Court will **GRANT** Defendants' motion with respect to claim 21.

The dependent claims in the '204 patent that Plaintiff asserts also do not sufficiently transform the method asserted in Claim 1 so as to render the method in Claims 2 and 19 patent-eligible. Individually, the additional element in Claim 2 adds little to Claim 1 that might transform the claimed method into a patent-eligible application of the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. Such element merely associates an additional generic component, a "user input device," with the generic "display device" recited in Claim 1 and then recites using such input device to add a digital representation of the locate mark to the input image displayed on the display device. That element is a computerized analog of the conventional process of indicating the approximate location of a locate mark on the sketch or drawing of the dig area that is typically included in a paper manifest. See '204 patent at 2:17-22. Therefore, considered individually, Claim 2 is not transformative under Alice. Likewise, in combination with the other elements in Claim 1, on which Claim 2 is dependent, Claim 2 is not transformative because it merely adds another generic component to the patent-ineligible method in Claim 1 involving the computerized

implementation of the conventional process of documenting information related to a locate operation. Therefore, the Court finds that Defendants have shown, by clear and convincing evidence, that Claim 2 is invalid because it does not claim patent-eligible subject matter. The Court will **GRANT** Defendants' motion with respect to Claim 2 as well.

Like Claim 2, Claim 19 does not include an additional feature sufficient to transform the method claimed therein from an attempt to claim the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. Individually, Claim 19 recites the method in Claim 1 wherein the input image in element A thereof is a photographic image comprising "one or more of a topographical image, a satellite image, and an aerial image." See '204 patent at 35:66-67, 36:4-6. Although, viewing the facts in the light most favorable to Plaintiff, the use of a photographic image in documenting a locate operation might be novel, the Court concludes that the use of such an image, topographical, satellite, aerial, or otherwise, does not sufficiently transform the method in Claim 19 from an attempt to claim the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. The '204 patent itself indicates that "manifests"

documenting some or all of the information regarding a locate operation "may typically contain" "a sketch or drawing of the dig area that identifies the approximate location of the locate marks . . . present at the dig area." '204 patent at 2:17-22. Thus, at best, the method in Claim 19 differs from the conventional method of documenting a locate operation described in the '204 patent through: 1) the use of a topographical, satellite, or aerial image, rather than a sketch or drawing, upon which to add representations of the location of locate marks; and 2) the use of generic computer components to create computer-readable files containing information that typically would be present in a paper manifest. For the reasons stated above, the latter addition is not transformative, but conventional. The Court also finds that the recitation of a photographic image, rather than a sketch or drawing, as the backdrop to which representations of locate marks are added to a "manifest" does not transform the claimed method from an attempt to claim an abstract idea. A "sketch or drawing of the dig area," id. at 2:20, at its core, is a hand-made image of the dig area. To the extent that conventional locate operations involved the "identifi[cation] of the approximate location of the locate marks . . . in the dig area" on such a hand-made image, the use of a photographic image—even a topographical, satellite, or aerial one—to replace the hand-made sketch or

drawing used in conventional locate operations does not recite a transformative additional feature because such element simply substitutes a more accurate image of the dig area, the photographic image, for the image previously incorporated into the locate-operation-documentation process, the hand-made drawing or sketch of the dig area. Undoubtedly, the use of a photographic image reduces the effect of human error on the documentation of locate marks in a manifest. Cf. id. at 2:41-43 (noting the effect of "human error" in conventional locate operation). However, the abstract idea to which Claim 19 is directed is the creation of computer-readable files to store information, as applied in the particular technological environment of conducting a locate operation and, therefore, it is hardly transformative to recite the use of a more accurate photographic image as the baseline upon which representations of locate marks are added because such use merely improves the accuracy of the information stored in the computer readable file.[12] Therefore, the Court finds that Defendants have shown by

[12] A hypothetical involving the use of a photographic image in a conventional locate operation might be instructive of why the recitation of a topographical, satellite, or aerial image as the input image upon which the digital representation of the locate marks is added does not transform Claim 19 into a patent-eligible method. Rather than using a hand-made drawing or sketch of the dig area, the conventional method of documenting a locate operation might be performed using a photographic image of the dig area—possibly a topographical, satellite, or aerial image. Instead of drawing or sketching the dig area, a person might obtain a photographic image of the dig area. Such person could then, by hand, "identif[y] the

clear and convincing evidence that, both individually and as an ordered combination with the other elements claimed in Claim 17 and Claim 1, Claim 19 does not claim patent-eligible subject matter because it does not include sufficient additional features to transform it from an attempt to claim an abstract idea. Accordingly, the Court will **GRANT** Defendants' motion with respect to Claim 19.

The Court rejects Plaintiff's argument that Claim 1 is not directed towards an abstract idea because it does not preempt the recording of locate operations. In this case, though the field in which Claim 1 might operate is narrow, its preemptive effect within that field of use is broad. Cf. Loyalty Conversion, 2014 WL 4364848, at *11 (noting that "in this case, although the field of use is narrow—conversion of one entity's

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approximate location of the locate marks . . . present at the dig area" on such image, rather than on the "sketch or drawing" typically used in documenting information regarding a locate operation. Cf. '204 patent at 2:17-22. That hypothetical process would result in a paper manifest that likely would be more accurate than one relying on a draft or sketch of the dig area. However, the recitation of that hypothetical method of creating a paper manifest incorporating a photographic image as the medium to which hand-made representations of physical locate marks are added would not render such process patent-eligible subject matter. It follows, therefore, that the recitation of a photographic image in the method of Claim 1—that the Court has found to be patent-ineligible because it merely recites the use of generic computer components to perform the conventional method of creating a paper manifest documenting a locate operation—does not alter the Court's conclusion that such method is patent-ineligible because it simply involves the use of generic computer components to perform the patent-ineligible hypothetical method of creating a hand-made manifest to store information concerning a locate operation that includes a photographic image of the dig area to which representations of locate marks have been added.

loyalty points into those of another entity—the preemptive effect of [the plaintiff's] claims within that field of use is broad."). As the specification indicates, in the underground facility locating industry, "[i]t is generally recommended, or in some jurisdictions required, to document . . . the approximate geographic location of the locate marks," with such documentation—the "manifest"—"typically contain[ing] a variety of information related to a locate operation including a sketch or drawing of the dig area that identifies the approximate location of the locate marks and the environmental landmarks present at the dig area." '204 patent at 1:65-67, 2:1-22. Thus, the specification of the '204 patent indicates that the documentation of locate marks on an image or representation of a dig area, for example, through the creation of a sketch of the dig area that identifies the approximate location of locate marks, is common in the field of locate operations.[13] Although Claim 1 might not preempt manually creating a manifest, the Court concludes that Claim 1 has a broad preemptive effect in the technological environment of conducting locate operations as indicated in the specification because it preempts locate operations involving the computerized documentation of locate

[13] Plaintiff makes much of the fact that the use of an image of the dig area to create a manifest is novel in the field of locate operations; however, the Federal Circuit has rejected the notion that "the addition of merely novel or non-routine components to the claimed idea necessarily turns an abstraction into something concrete." Ultramercial, 2014 WL 5904902, at *4.

marks on an "image[] or other representation[] of a dig area," Pl.'s Opp'n to Mot. for J. on the Pleadings at 22, and storage of such image in a computer-readable file.[14] Preventing the use of generic computer components, performing in a conventional manner, to store information regarding a locate operation that ordinarily would be included in paper manifests has a broad preemptive effect.

The Court also rejects Plaintiff's contention that the presence of "real-world steps" in Claim 1 renders it patentable subject matter. Plaintiff argues that "[b]ecause the claims require real-world physical activities in conjunction with the computerized steps, the methods and systems are not ephemeral or purely mental, and, thus, they are not directed to an abstract idea." Pl.'s Opp'n to Mot. for J. on the Pleadings at 23. However, Plaintiff has cited no authority to support its proposition that "real-world steps" somehow prevent a claimed invention from qualifying as an abstract idea. To the contrary, numerous courts have concluded that patent claims were directed

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[14] Cf. Wolf, 2014 U.S. Dist. LEXIS 156527, at *29-30, *39-40 (finding that patents "directed to the abstract idea of providing event photographs organized by participant, as applied using the internet" were not patent-eligible merely because they "[did] not monopolize the field of event photograph distribution."); Joao Bock, 2014 WL 7149400, at *8 (noting that "[w]ith the ubiquity of computers, arguing that a field is not preempted because a claim may be performed 'by hand' is not persuasive. . . . Allowing the asserted claims to survive would tie up any innovation related to performing banking transactions on computers which would, in turn, monopolize the 'abstract idea.'").

to an abstract idea, even where the elements of such claims involved "real-world steps." See, e.g., Amdocs, 2014 WL 5430956, at *9 (finding that a patent claimed an abstract idea even though elements of such patent contained user actions); Cogent Med., Inc. v. Elsevier Inc., ___ F. Supp. 3d ___, Case No. C-13-4479-RMW, C-13-4483, C-13-4486, 2014 WL 4966326, at *2, *4 (N.D. Cal. Sept. 30, 2014) (same); DietGoal, 2014 WL 3582914, at *2, *10 (same). Therefore, the Court finds unpersuasive CertusView's assertion that the presence of "real-world" steps in Claim 1 renders the subject matter of such claim patent-eligible.

Finally, the Court rejects Plaintiff's argument that the computerized components in the asserted claims of the '204 patent "play a significant part in permitting the claimed method to be performed, rather than function solely as an obvious mechanism for permitting a solution to be achieved more quickly." See Pl.'s Opp'n to Mot. for J. on the Pleadings at 26. As stated above, the computer components included in the asserted claims of the '204 patent are simply generic components that perform conventional computer functions. Importantly, unlike the case upon which Plaintiff relies, California Institute of Technology v. Hughes Communications, Inc., the computer components in the asserted claims of the '204 patent do not "improve a computer's functionality by applying concepts

unique to computing . . . to solve a problem unique to computing." 2014 WL 5661290, at *20; see also DDR Holdings, LLC v. Hotels.com, L.P., ___ F.3d ___, No.2013-1505, 2014 WL 6845152, at *12 (Fed. Cir. Dec. 5, 2014) (finding that the use of computer components in a claim transformed such claim because "[i]nstead of the computer network operating in its normal, expected manner by sending the website visitor to the third-party website . . . the claimed system generates and directs the visitor to the above-described hybrid web page . . . .").[15] Instead, they simply attempt to solve problems in the particular

[15] The Federal Circuit announced its decision in DDR Holdings subsequent to the parties' briefing in this case. Accordingly, even though the parties' briefs did not address the decision in DDR Holdings, the Court has considered it—along with the Federal Circuit's December 23, 2014 decision in Content Extraction—in resolving this motion. The Court finds that the asserted claims of the patents-in-suit in this case are distinguishable from the claims at issue in DDR Holdings. The DDR Holdings court, in determining that a trial court properly denied a motion for judgment as a matter of law on the basis of invalidity under section 101, emphasized that the claims at issue

> [stood] apart because they do not merely recite the performance of some business practice known from the pre-internet world along with the requirement to perform it on the internet. Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.

2014 WL 6845152, at *10. Unlike DDR Holdings, the asserted claims of the patents-in-suit do not solve any problem unique to computing. Rather, as the Court has noted above and will note further below, such claims merely recite the use of generic computer components to perform tasks routinely performed manually in the field of conducting a locate operation. In general, they recite the performance of business practices common in the field of conducting a locate operation, but with the requirement to perform such practices using generic computer components. Thus, the Federal Circuit's decision in DDR Holdings does not alter the Court's conclusion that the asserted claims of the patents-in-suit are invalid because they do not claim patent-eligible subject matter.

technological environment of conducting locate operations, such as human error in the creation of sketches of a dig area that are contained in paper manifests, see '204 patent at 2:30-32, using generic computer components to perform conventional computer operations. Accordingly, the Court rejects Plaintiff's argument that the computer components in the asserted claims of the '204 patent play a significant part in permitting the claimed method to be performed.

b. The '344 Patent

The Court next considers whether the '344 patent claims patent-eligible subject matter under the two-part test set forth in Alice. Like the '204 patent, the Court concludes that the asserted claims of the '344 patent are directed to an abstract idea and the elements of such claims, considered both individually and as an ordered combination, do not transform such claims into patent-eligible subject matter. Accordingly, the Court will **GRANT** Defendants' motion with respect to the '344 patent.

i. Claims 1, 4, 13, and 17 Claim an Abstract Idea

Under the first step in Alice, the Court finds that the asserted method and apparatus claims, Claims 1, 4, 13, and 17, of the '344 patent are directed to the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate

operation, for much the same reasons that the asserted claims in the '204 patent are directed to such abstract idea. Claim 13 is directed to a method for generating a "searchable electronic record of a locate operation," that is, "one or more computer-readable files that include some or all of the information regarding a locate operation," Markman Opinion and Order at 58, "performed by a locate technician in response to a locate ticket and in advance of planned excavation activities at a dig area identified by the locate ticket . . . ." '344 patent at 18:55-59. The elements of Claim 13 comprise: A) electronically receiving information derived from a "locate ticket," that is, "the set of instructions necessary for a locate technician to perform a locate operation," Markman Opinion and Order at 63-64, and an image of the dig area; B) combining such image of the dig area with "image-related information" that includes the geographic location of the dig area, a timestamp indicative of when the locate operation occurred, and a digital representation of at least one physical locate mark; and C) electronically transmitting and/or storing non-image data relating generally to a locate operation to create a computer-readable file including information related to a locate operation, so that such operation is verifiable. See '344 patent at 18:60-67, 19:1-21. Those elements embrace the abstract process of taking input information, in the form of an image of the dig area and locate

ticket information; combining additional information to it, the geographic location of the dig area, a timestamp, and a digital representation of the physical locate marks; and storing such information in a computer readable file, merely as applied in the particular technological environment of conducting locate operations. Therefore, the Court concludes that Claim 13 of the '344 patent is directed to the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting locate operations.

The Court also determines that the other asserted method claim, Claim 17, is directed to the same abstract idea as that to which Claim 13 is directed. Claim 17 is dependent on Claim 13 and does not limit the application of the claimed method in a manner that prevents such claim from being directed towards an abstract idea. Claim 17 merely limits the method in Claim 13 to require that the image in Claim 13 comprise an aerial image. See '344 patent at 19:30-31. Put simply, Claim 17 limits Claim 13 by altering the form of information with which the geographic location, timestamp, and digital representation of a locate mark are combined. Nonetheless, as stated above regarding Claim 19 of the '204 patent, limiting the form of initial information with which additional information is combined and then transmitted or stored as a computer readable file does not alter

the Court's conclusion that such Claim is directed towards an abstract idea.

Similarly, the Court finds that the asserted apparatus claims in the '344 patent, Claims 1 and 4, are directed towards the same abstract idea to which the asserted method claims in such patent are directed. As noted above, the Supreme Court has indicated that if, in substance, an apparatus claim involves the mere configuration of generic computer components to execute the abstract idea claimed in a method claim, such apparatus claim is directed towards the same abstract idea as the method claim. See Alice, 134 S. Ct. at 2360. Here, Claim 1 of the '344 patent simply recites the use of generic computer components, in the form of a "communication interface," "display device," "memory," and "processing unit," to perform the method recited in Claim 13. See '344 patent at 17:40-67, 18:1-19, 18:55-67, 19:1-21. Likewise, Claim 4 simply recites an apparatus used to execute the method claimed in Claim 17. Accordingly, the Court concludes that Claims 1 and 4 of the '344 patent are also directed to the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation.

ii. Claims 1, 4, 13, and 17 Do Not Transform the Abstract Idea to Which They Are Directed

Under the second stage of the Alice test, Claims 1, 4, 13,

and 17 satisfy the patentable subject matter requirement of 35 U.S.C. § 101 only if they transform the abstract idea to which they are directed into a patent-eligible application of an abstract idea. Just as the asserted claims in the '204 patent did not transform such claims to constitute patentable subject matter because, individually and in combination, the elements of such claims merely recited the use of generic computer components to perform the conventional method of documenting a locate operation, so also do the asserted claims of the '344 patent fail under Alice because they lack additional features that transform those claims into a patentable application of an abstract idea, rather than an attempt to claim such idea itself. The asserted claims in the '344 patent principally differ from the asserted claims in the '204 patent because the '344 patent incorporates the electronic receipt of locate ticket information and the addition of the geographic location of the dig area and a timestamp to the input image initially received. However, that process simply reflects the use of generic computer components to record information traditionally included in paper manifests, which, as determined above with respect to the '204 patent, does not transform the abstract idea claimed.

Individually, the elements in Claim 13 of the '344 patent do not transform such claim so as to render Claim 13 patent-eligible. Elements A1 and A2 recite "electronically receiving,"

respectively, "ticket information derived from a locate ticket" and "an image of the geographic area comprising the dig area;" however, as noted above with respect to element A of Claim 1 of the '204 patent, electronic receipt of data is not a transformative additional feature that will render patent-eligible an otherwise patent-ineligible abstract idea. Accordingly, just as element A in Claim 1 of the '204 patent did not transform such claim because it merely recited electronically receiving an image of the dig area, so also does element A2 fail to transform Claim 13 of the '344 patent by reciting electronically receiving "an image of the geographic area comprising the dig area." Moreover, the '344 patent itself establishes that, in the conventional process of conducting a locate operation, locate technicians receive locate tickets containing the "set of instructions necessary for a locate technician to perform a locate operation." '344 patent at 1:46-48. Given that such set of instructions is "necessary for a locate technician to perform a locate operation," the fact that element A1 simply recites the electronic receipt of such ticket information, which the locate technician conventionally would receive in some other manner, can hardly be said to transform Claim 13.

Likewise, element B, considered alone, does not transform the abstract idea to which Claim 13 is directed. The addition

of a digital representation of a locate mark is not transformative for the reasons stated above regarding the '204 patent. Furthermore, the combination of "a geographic location associated with the dig area" and "a timestamp indicative of when the locate operation occurred" do not transform the abstract idea embodied in Claim 13. In element B, the combination of such information with the "electronically received image" is akin to the computerization of the conventional process of manually documenting a locate operation. In a conventional locate operation, the documentation of the information regarding a locate operation, among other things, may "typically contain . . . the time and date the locate operation was performed" and "the geographic address of the dig area." See '344 patent at 2:6-18. Element B of Claim 13 simply recites the combination of that same information with an image to create a computer-readable file containing such information. Therefore, element B is tantamount to reciting the conventional method of documenting a locate operation, as applied using generic computer components. Therefore, under Alice, such element is not transformative. See 134 S. Ct. at 2357-58.

Finally, considered individually, element C does not transform Claim 13 into patent-eligible subject matter. The process of "electronically transmitting and/or electronically storing" "one or more computer readable files that include some

or all of the information regarding a locate operation," Markman Opinion and Order at 58 (construing "searchable electronic record of a locate operation"), "so that performance of the locate operation is verifiable," does not constitute a transformative additional feature in Claim 13 because it involves the use of generic computer components to perform the generic task of electronic recordkeeping. See Alice, 134 S. Ct. at 2359 (noting that "electronic recordkeeping [is] one of the most basic functions of a computer" and is a "purely conventional" use of a computer); buySAFE, 765 F.3d at 1355 (finding that using a computer to send and receive information over a network without any further specification was "not even arguably inventive"); see also supra Part III.B.2.a.ii. Accordingly, none of the elements in Claim 13 transform such claim into patent-eligible subject matter when considered individually.

When considered in combination, the elements in Claim 13 fail to transform such claim into the patent-eligible application of an abstract idea. Claim 13 of the '344 patent is much the same as Claim 1 of the '204 patent, with the added limitations that: locate ticket information is electronically received; and an electronically received image is combined with a geographic location associated with a dig area and a timestamp indicative of when the locate operation occurred. Thus, to the

extent that the '204 patent fails to claim patent-eligible subject matter, whether Claim 13 is patentable depends on the extent to which such additional limitations in Claim 13 qualify as transformative additional features. To reiterate, "wholly generic computer implementation is not generally the sort of 'additional feature' that provides any 'practical assurance that the process is more than a drafting effort designed to monopolize the [abstract idea] itself.'" Alice, 134 S. Ct. at 2358 (alteration in original) (quoting Mayo, 132 S. Ct. at 1297). As the specification indicates, receiving a locate ticket containing the information necessary to perform a locate operation and documenting information regarding a locate operation in a manifest containing the geographic address of the dig area and the time and date the locate operation was performed was a typical feature of conventional locate operations. In essence, Claim 13, like Claim 1 of the '204 patent, is directed towards performing that conventional activity using generic computer implementation of such process. Accordingly, under Alice, Claim 13 lacks an innovative concept necessary to transform such claim into a patent-eligible application of an abstract idea, rather than simply an attempt to claim the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. Thus, Defendants

have shown, by clear and convincing evidence, that Claim 13 is invalid because it does not claim patent-eligible subject matter under 35 U.S.C. § 101 and, therefore, the Court will **GRANT** Defendants' motion with respect to Claim 13.

The Court also finds that Claim 17 of the '344 patent does not contain an innovative concept sufficient to transform it into patent-eligible subject matter. As stated above with respect to Claim 19 of the '204 patent, the recitation of an aerial image as the medium to which representations of physical locate marks are added is not transformative. Similarly, the recitation of an aerial image with which a geographic location associated with the dig area and a timestamp are combined does not constitute an innovative concept, when considered in the particular technological environment of locate operations, because the geographic address of a dig area and an indication of the date and time at which a locate operation was performed were typically incorporated into a paper manifest containing a sketch or drawing of the dig area. The combination of such information with an aerial image using a computerized process, rather than combining such information with a sketch or drawing of the dig area using a manual process, is not transformative because it is essentially the same as computerizing the conventional method of recording information relating to a locate operation, albeit using an aerial image rather than a

sketch. Therefore, the Court finds that, like Claim 13, Claim 17 does not claim patent-eligible subject matter. The Court will **GRANT** Defendants' motion as to Claim 17.

Having concluded that Claims 13 and 17, the asserted method claims in the '344 patent, fail to claim patent-eligible subject matter, the Court must also conclude that Claims 1 and 4 of such patent do not claim patent-eligible subject matter. As stated above, Claims 1 and 4 simply recite generic computer components configured to implement the methods stated in Claims 13 and 17, respectively. Accordingly, under Alice, for the purposes of determining whether Claims 1 and 4 claim patent-eligible subject matter, the validity of such claims is tied to Claims 13 and 17. Claims 13 and 17 do not claim patentable subject matter, therefore, nor do Claims 1 and 4. Thus, the Court will **GRANT** Defendants' motion with respect to Claims 1 and 4 of the '344 patent.[16]

c. The '359 Patent

The Court will now analyze whether the '359 patent claims patent-eligible subject matter. The asserted claim in such

[16] Although Plaintiff did not specifically address the '344 patent in its brief, to the extent Plaintiff's arguments with respect to preemptive effect, "real-world" steps, and the "significant role" of the enumerated computer components in permitting the claimed method to be performed apply to the '344 patent, the Court rejects those arguments with respect to such patent for the same reasons stated above with respect to the '204 patent. In addition, the Court rejects those same arguments with respect to the '359, '341, and '001 patents for the same reasons stated above.

patent, Claim 1, is directed towards the same abstract idea as the claims in the '204 and '344 patents. Similarly, the elements of Claim 1, which is very similar to the asserted method claims in the '204 and '344 patents, when considered either individually or in an ordered combination do not include an inventive concept sufficient to transform such claim into the patent-eligible application of an abstract idea.

i. Claims 1 Is Directed Towards an Abstract Idea

Under step one of Alice, the Court finds that, by clear and convincing evidence, Defendants have shown that Claim 1 of the '359 patent is directed towards the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. Claim 1 of such patent is directed at a method for generating a "searchable electronic record of a locate operation," that is, "one or more computer-readable files that include some or all of the information regarding a locate operation," Markman Opinion and Order at 58, "performed by a locate technician." See '359 patent at 17:53-55. Distilled to their simplest form, the elements in Claim 1 recite: A) electronically receiving an aerial image of the dig area, with such image displayed, at least in part on a display device; B) adding to such image a digital representation of a physical locate mark; and C) electronically transmitting and/or storing a

computer readable file that includes some or all of the information regarding a locate operation, with such computer readable file comprising the aerial image to which at least one digital representation of a physical locate mark has been added and a data set including a set of geographic points, along a marking path, including geographical coordinates responding to physical locate marks, the property address associated with the physical locate marks, a timestamp of when the locate operation occurred, the name of the locate technician, the name of the company that performed the locate operation, and a ticket number associated with such operation. See id. at 17:53-67, 18:1-21. Those elements embrace the abstract process of receiving information, in the form of the aerial image, adding additional information to it, in the form of the digital representation of the physical locate mark, and then storing such combined information in a computer readable file with other information related to the locate operation. In short, such patent claims the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation because Claim 1 merely recites a method for creating a computer-readable file that stores much of the information pertinent to a locate operation.

ii. Claim 1 Does Not Transform the Abstract Idea to Which It Is Directed

Under Alice step two, the Court finds that Defendants have shown, by clear and convincing evidence, that the elements of Claim 1, individually and as an ordered combination, fail to transform such claim into the patent-eligible application of the abstract idea to which Claim 1 is directed. Elements A and B of Claim 1 are essentially the same as elements A and B of Claim 1 of the '204 patent, as limited by the additional element in Claim 19 of the '204 patent and, therefore, do not transform Claim 1 of the '359 patent into a patent-eligible application for the same reasons Claim 19 is deficient under 35 U.S.C. § 101. Element C of the '359 patent is the only element that differs in any material way from the asserted claims in the '204 and '344 patents. However, element C is not transformative because it merely recites the process of creating a generic computer-readable file containing information specific to the particular technological environment of conducting locate operations. See, e.g., Alice, 134 S. Ct. at 2359 (citation omitted) (holding that "[u]sing a computer to create and maintain 'shadow' accounts amounts to electronic record keeping—one of the most basic functions of a computer."); Loyalty Conversion, 2014 WL 4364848, at *10 (indicating that data recording and storage are conventional functions of a generic

computer). The fact that the information included in the generic computer-readable file might be detailed and specific to the particular technological environment of locate operations does not affect the Court's conclusion that storing such information on a computer-readable file is not transformative. See Content Extraction, 2014 WL 7272219, at * 4 (finding that "an attempt to limit the abstract idea of recognizing and storing information from hard copy documents using a scanner and a computer to a particular technological environment" was not transformative). Additionally, element C lacks a transformative innovative concept because it merely recites a computerized process of documenting information related to a locate operation that conventionally would be included in a paper manifest documenting such information. As the '359 patent itself states, paper manifests "may typically contain a variety of information related to a locate operation including a sketch or drawing of the dig area that identifies the approximate location of the locate marks . . . present at the dig area, the time and date the locate operation was performed, identification of the entity and the locate technician performing the locate operation, [and] . . . the geographic address of the dig area . . . ." '359 patent at 2:13-24. Accordingly, the patent itself indicates that the information to be included in the data set stated in element C—a set of geographic points including geographical

coordinates corresponding to physical locate marks, a property address associated with the physical locate marks, a timestamp indicative of when the operation occurred, the name of the technician, the name of the company responsible for performing the locate operation, and a ticket number—is essentially the same as the information that would traditionally be included in the documentation of a locate operation in a hand-made manifest. Although geographical coordinates corresponding to the physical locate marks might differ in detail from a sketch identifying the approximate location of the locate marks, such information does not differ in kind. Similarly, the Court does not find that the inclusion of a ticket number transforms element C from a mere attempt to obtain a patent on the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation. Thus, individually, the elements in Claim 1 of the '359 patent do not satisfy Alice step two.

Considered as an ordered combination, the elements in Claim 1 also fail to transform such claim into a patent-eligible application of the abstract idea to which Claim 1 is directed. Just as with the asserted claims in the '204 and '344 patents, Claim 1 of the '359 patent merely recites a method of using generic computer components to perform the conventional locate-operation-documentation process described in the specification

to the '359 patent. Accordingly, just as those claims in the '204 and '344 patents do not claim patent-eligible subject matter, so also does Claim 1 in the '359 patent fail under Alice. The Court recognizes that some of the information, for example, the geographic coordinates corresponding to physical locate marks, included in element C in the data set stored in the computer-readable file contains greater detail than, or might otherwise be absent from, paper manifests created during the conventional method of documenting a locate operation; however, the Court finds that such additional information does not transform the method in Claim 1 from an attempt to claim the abstract idea of creating a computer-readable file to store information, as applied in the particular technological environment of conducting a locate operation, because such information is the same sort of information that ordinarily would be included in a paper manifest. Therefore, the Court concludes that Defendants have shown, by clear and convincing evidence, that Claim 1 in the '359 patent does not claim patent-eligible subject matter under 35 U.S.C. § 101. The Court will **GRANT** Defendants' motion with respect to such claim.

d. The '341 Patent

Next, the Court will determine whether the asserted claims in the '341 patent, Claims 1, 7, 16, 17, and 28, claim patent-eligible subject matter. Similar to the '204, '344, and '359

patents, the asserted claims in the '341 patent are directed to an abstract idea. Like the other patents, the elements in such claims, both individually and as an ordered combination, do not transform such claims into patent-eligible subject matter. Therefore, the Court will **GRANT** Defendants' motion with respect to the '341 patent.

i. Claims 1, 7, 16, 17, and 28 Are Directed to an Abstract Idea

The Court begins by applying the first step in Alice and finds that the asserted claims in the '341 patent are directed to the abstract idea of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation. At its core, Claim 1 recites a method of: A) performing a locate operation in which a physical colored marker is applied to the ground, pavement, or another surface in a dig area to indicate the presence or absence of an underground facility; B) displaying on a display device a digital image of the dig area; C) adding to such image an electronic colored marker corresponding to the physical colored marker applied in the dig area; and D) electronically transmitting and/or electronically storing non-image data relating generally to a locate operation. See '341 patent at 34:62-67, 34:1-15; Markman Opinion and Order at 49-50 (construing "information-relating to the marked-up image" as "non-image data relating generally to a locate operation."). In

other words, Claim 1 recites the abstract process of performing a locate operation; displaying information, in the form of a digital image, on a display device; adding additional information to such image, in the form of an electronic colored marker; and electronically transmitting and/or electronically storing information, in the form of non-image data relating generally to a locate operation. Therefore, the Court concludes that Defendants have shown, by clear and convincing evidence, that Claim 1 in the '341 patent is directed to the abstract idea of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation, because Claim 1 merely recites a process of taking locate-operation-related information in the form of a digital image, adding more information to such information in the form of an electronic colored marker, and then electronically transmitting or storing information, in the form of non-image data relating generally to a locate operation.

The Court also determines that the other asserted method claim, Claim 7, which is dependent on Claim 1, is directed to the same abstract idea to which Claim 1 is directed. Claim 7 limits element B in Claim 1, "displaying on a display device at least one digital image of a geographic area comprising the dig area," in two ways: B1) electronically receiving ticket information derived from a locate request ticket that specifies

the dig area and requests performance of the locate operation; and B2) "selecting the at least one digital image for display on the display device based at least in part on the ticket information received in B1)." See '341 patent at 35:4-5, 46-53. The Court finds that despite the additional limitations in Claim 7, Claim 7 is directed to the same abstract idea in Claim 1 because such limitations merely increase the amount of information received in element B of Claim 1 and limit the manner in which information, in the form of the digital image, is selected.

Likewise, the Court concludes that the computer-readable storage device and apparatus claims, Claims 16 and 17, respectively, are directed towards the same abstract idea in Claim 1. As noted above with respect to the asserted claims in the '204 and '344 patents, to avoid interpreting section 101 to make patent eligibility depend simply on the draftsman's art, when an apparatus or computer-readable medium claim merely recites generic computer components configured to implement the same idea present in a method claim, such claims should be treated the same for the purposes of determining whether they claim patent-eligible subject matter. See Alice, 134 S. Ct. at 2360 (citations omitted); Joao Bock, 2014 WL 7149400, at *8 (finding that "[t]he fact that the asserted claims are apparatus claims, not method claims, does not change the court's

analysis"); cf. CMG Fin. Servs., Inc. v. Pac. Trust Bank, F.S.B., ___ F. Supp. 2d ___, Case No. CV 11-10344 PSG (MRWx), 2014 WL 4922349, at *7 (C.D. Cal. Aug. 29, 2014) (citations omitted) (holding that "[c]omparing the language of the system claims with that of the method claims, it is clear that they are functionally identical . . . . Thus, they must be treated as equivalent for the purposes of the § 101 analysis."); DietGoal, 2014 WL 3582914, at *14 (same). In this case, Claim 16 merely recites generic computer components, in the form of a computer-readable storage device and a processor, configured to accomplish the method in Claim 1. See '341 patent at 36:36-57. Likewise, Claim 17 merely recites an apparatus containing generic computer components—a "communication interface," "display device," "user input device," "memory," and "processing unit"—configured to perform the method in Claim 1. Thus, the Court concludes that, to the extent that Claim 1 is directed to the abstract idea of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation, Claims 16 and 17 are directed to that same abstract idea because they do not differ, in substance, from the method in Claim 1.

The Court further finds that Claim 28 is directed to the same abstract idea as Claim 17 because Claim 28 is dependent on Claim 17, but does not include sufficient additional limitations

to prevent such claim from being directed to the abstract idea claimed in Claim 17. Claim 28 recites the apparatus in Claim 17 with the additional limitation that in D) of such claim, "the information relating to the marked-up image includes at least one timestamp indicative of a date and/or a time at which the locate operation is performed in A)." Id. at 38:47-50. Thus, Claim 28 limits the "non-image data relating generally to a locate operation" in Claim 17 to require that such data include a timestamp. In other words, Claim 28 simply limits the form of information electronically transmitted or stored in Claim 17. The Court finds that such limitation is insufficient to direct Claim 28 to patent-eligible subject matter and, therefore, the Court concludes that Claim 28, like the other asserted claims in the '341 patent, is directed to the abstract idea of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation.

ii. Claims 1, 7, 16, 17, and 28 Do Not Transform the Abstract Idea to Which They Are Directed

Step two of Alice requires the Court to ascertain whether the elements of the asserted claims in the '341 patent contain additional features that are sufficient, either individually or as an ordered combination, to transform such claims into the patent-eligible application of an abstract idea, rather than

simply an attempt to claim the abstract idea itself. Element A of Claim 1 does not include a transformative additional feature because it merely recites the commonplace practice—indeed, one that is not just commonplace, but also "required"—of performing a locate operation, a process during which a locate technician uses physical colored markers to indicate the presence or absence of underground facilities. See id. at 1:36-62 (describing the conventional process of using color-coded paint or flags to indicate the presence or absence of underground facilities at a dig area). Element B, involving the display of a digital image of the dig area on a display device, does not constitute a transformative additional feature for the same reason element B in Claim 1 of the '204 fails to do so, namely, because using a generic computer component, a display device, to perform the common computer task of displaying information is not transformative under Alice. Similarly, element C does not transform Claim 1 into a patent-eligible application of an abstract idea for the same reasons that element C of Claim 1 of the '204 patent did not render that claim patent-eligible. The only difference between the elements C in Claim 1 of the '341 patent and Claim 1 of the '204 patent is that the former requires the addition of an "electronic colored marker" to the displayed image, rather than the "digital representation" added in the latter; that is a distinction without a difference.

Finally, when considered individually, element D does not transform Claim 1 of the '341 patent. The electronic transmission or electronic storage of non-image data relating generally to a locate operation, element D of Claim 1, recites a generic process of electronically storing information. However, such element is not transformative because it merely suggests the use of generic computer components to perform "one of the most basic functions" of a computer, "electronic recordkeeping." See, e.g., Alice, 134 S. Ct. at 2359 (citation omitted); Amdocs, 2014 WL 5430956, at *8. Moreover, element D simply recites a computerized method of performing a conventional activity in the particular technological environment of locate operations because the paper manifests conventionally used to document locate operations "may typically contain" non-image information relating generally to a locate operation, in the form of "the time and date the locate operation was performed," "identification of the entity and locate technician performing the locate operation," "the entity requesting the locate operation," "the geographic address of the dig area," "the type of markings used for the locate operation," "notes from the locate technician," "and/or a technician signature." '341 patent at 2:27-39, 49-50. Therefore, individually, the elements in Claim 1 do not transform such claim into patent-eligible subject matter.

Taken together, as an ordered combination, the elements of Claim 1 of the '341 patent do not transform such claim into the patent-eligible application of an abstract idea for the same reasons that Claim 1 of the '204 patent fails to claim patent-eligible subject matter. As discussed above, in the conventional process of documenting a locate operation, persons create manifests that include some or all of the information regarding a locate operation, and such manifests "may typically contain" non-image information relating generally to a locate operation. It follows, therefore, that Claim 1, which simply recites an electronic method of performing that conventional method, fails under Alice because such claim "simply instruct[s] the practitioner to implement the abstract idea" of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation, using generic computer components. See 134 S. Ct. at 2359. Therefore, the Court holds that Defendants have shown, by clear and convincing evidence, that Claim 1 of the '341 patent is invalid because it claims a patent-ineligible abstract idea. The Court will, accordingly, **GRANT** Defendants' motion as to such claim.

Having concluded that Claim 1 is invalid, the Court finds that Claims 16 and 17 of the '341 patent are also invalid because they merely recite a computer-readable storage device

and an apparatus comprised of generic computer components configured to perform the method in Claim 1 of such patent. Thus, for the same reasons, stated above, where the Court found that Claim 21 of the '204 patent was invalid because the functionally identical method claim in Claim 1 was invalid, the Court finds that Claims 16 and 17 are invalid because they are functionally identical to Claim 1. Consequently, the Court will **GRANT** Defendants' motion with respect to Claims 16 and 17 of the '341 patent because Defendants have shown, by clear and convincing evidence, that such claims are invalid for failure to claim patent-eligible subject matter.

The Court also concludes that Claim 7, which is dependent on Claim 1, fails under step two of Alice because it does not include elements that, individually or in combination, transform the method stated in Claim 1 into a patent-eligible application of an abstract idea. Individually, element B1 of Claim 7 does not transform such claim because it merely recites electronically receiving ticket information from a locate request ticket, with such ticket specifying the dig area and requesting the performance of a locate operation. However, locate technicians use locate tickets in the conventional process of conducting locate operations because a locate ticket is "the set of instructions necessary for a locate technician to perform a locate operation." '341 patent at 1:67, 2:1-2.

Moreover, such tickets "might specify" "the address or description of the dig area to be marked." Id. at 2:2-4. Thus, element B1 merely recites an electronic process of receiving ticket information that a locate technician ordinarily would receive in some other manner and, therefore, such element does not contain a transformative additional feature under Alice. See, e.g., Content Extraction, 2014 WL 7272219, at *3-4. The Court also finds that, individually, element B2 of Claim 7 does not contain a transformative innovative concept. Such claim only recites selecting the digital image displayed on the display device based in part on the ticket information received. The Court has already determined that the use of a digital image is not transformative, as discussed above with respect to the claims in the '204 patent. If a digital image is used to document a locate operation, it is hardly transformative to determine what digital image to use in conducting such operation based on a locate ticket because, by definition, the locate ticket provides the information necessary for the technician to perform the locate operation in the first place—a locate ticket is "the set of instructions necessary for a locate technician to perform a locate operation," Markman Opinion and Order at 63-64 (emphasis added). Using information from the locate ticket to select the digital image is a logical corollary to the use of both a locate ticket to provide a locate technician with the

information necessary to conduct a locate operation and a digital image to document a locate operation. Thus, element B2 also fails to transform the abstract idea to which Claim 7 is directed.

Considered in combination with the other elements in Claim 1, the additional elements in Claim 7 do not transform such claim into the patent-eligible application of an abstract idea. Claim 1 merely recites an electronic iteration of the conventional process of storing information relating generally to a locate operation. Claim 7 adds to such process by reciting an electronic method of receiving a locate ticket and selecting a digital image based on such ticket; however, the conventional method of storing information relating generally to a locate operation also includes a locate technician receiving a locate ticket because such ticket contains the set of instructions necessary for the technician to perform a locate operation. Thus, the Court finds that, in combination, the elements in Claim 7 and in Claim 1 merely recite an electronic method of using generic computer components to perform the conventional method of storing information relating generally to a locate operation. Therefore, the Court concludes that Defendants have shown, by clear and convincing evidence, that Claim 7 of the '341 patent does not transform such claim from an attempt to claim the abstract idea of electronically transmitting or

storing information, as applied in the particular technological environment of conducting a locate operation. The Court will **GRANT** Defendants' motion as to Claim 7 of the '341 patent.

Finally, with respect to the '341 patent, the Court holds that Claim 28 does not satisfy the second part of the Alice test, as required to constitute a valid claim under 35 U.S.C § 101. Individually, the additional element in Claim 28 alters the apparatus claim in Claim 17, which is functionally identical to the method claim in Claim 1, by requiring that the non-image data relating generally to a locate operation, which the apparatus electronically transmits and/or electronically stores, contain "at least one timestamp indicative of a date and/or a time at which the locate operation is performed in A)." '341 patent at 38:47-50. However, such element, individually, does not transform the claimed invention because it is akin to reciting an electronic method of conducting the conventional method of documenting a locate operation in a paper manifest. As the specification indicates, manifests "may typically contain" different forms of non-image information relating generally to a locate operation. Importantly, such non-image information includes "the time and date the locate operation was performed." Id. at 2:27-29, 32-33. Thus, the Court finds that the additional element in Claim 28 is not transformative because it merely recites the use of generic computer components to

perform part of the conventional process of documenting a locate operation, namely, storing information concerning the date and time at which the locate operation occurred in a paper manifest. Likewise, the Court finds that such element, when considered in conjunction with the elements in Claim 17, does not transform Claim 28 into a patent-eligible application because such claim merely recites an apparatus composed of generic computer components configured to perform an electronic method of storing information relating to a locate operation that ordinarily would be stored using paper manifests in the conventional method of documenting a locate operation. Accordingly, Defendants have shown, by clear and convincing evidence, that Claim 28 of the '341 patent, along with the other asserted claims in such patent, is invalid because it is directed to the abstract idea of electronically transmitting or storing information, as applied in the particular technological environment of conducting a locate operation, but does not contain elements that, individually or as an ordered combination, transform such claim into a patent-eligible application of an abstract idea. Therefore, the Court will **GRANT** Defendants' motion as to Claim 28 of the '341 patent.

e. The '001 Patent

Lastly, the Court will consider whether Claim 1 of the '001 patent, the only asserted claim in such patent, claims patent-

eligible subject matter under 35 U.S.C. § 101. Applying the two-step framework stated in Alice, the Court concludes that Claim 1 is directed to the abstract idea of electronically displaying information, as applied in the particular technological environment of conducting a locate operation. The Court also finds that the elements in Claim 1, individually and as an ordered combination, fail to transform such claim into the patent-eligible application of an abstract idea. Therefore, the Court will **GRANT** Defendants' motion with respect to Claim 1 of the '001 patent.

i. Claim 1 Is Directed to an Abstract Idea

Under the now familiar first step of Alice, the Court must determine whether Claim 1 is directed to an abstract idea. Claim 1 is directed at a system for "electronically displaying information relating to the use of a marking tool configured to dispense one or more markers to mark . . . a location of an underground utility . . . ." '001 patent at 8:14-17. The elements in Claim 1 comprise: "a processor to receive" data that identifies a geographic location "relating to the use of the marking system or the marking tool;" and a "display device communicatively coupled to the processor." See id. at 8:19-22; Markman Opinion and Order at 44 (construing "location data" as "data that identifies a geographic location"). Further, "the processor uses" the data that identifies a geographic location

"to control the display device so as to visually display the dispensing of the one or more markers that mark the location of the underground utility on an electronic representation of an area that is marked and includes the location of the underground utility." '001 patent at 8:23-28; Markman Opinion and Order at 44. Those elements embrace the abstract idea of a system for: receiving information, in the form of data that identifies a geographic location relating to the use of the marking system or marking tool; and displaying information on a display device, in the form of the visual display of the "dispensing of the one or more markers that mark the location of the underground utility on an electronic representation of an area that is marked and includes the location of the underground utility." See '001 patent at 8:19-28. Thus, the Court concludes that Claim 1 is directed to the abstract idea of electronically displaying information, as applied in the particular technological environment of conducting a locate operation.

ii. Claim 1 Does Not Transform the Abstract Idea to Which It Is Directed

The Court will now consider whether the elements in the last remaining asserted claim, Claim 1 of the '001 patent, individually or as an ordered combination, transform such claim into a patent-eligible application of an abstract idea. The recitation of generic computer components to perform routine,

conventional activities does not provide a limitation sufficient to render patent-eligible, an otherwise patent-ineligible abstract idea. See, e.g., Content Extraction, 2014 WL 7272219, at *4. The first element in Claim 1 recites a processor to receive data that identifies a geographic location relating to the use of the marking system or the marking tool. '001 patent at 8:19-20. In essence, that element recites using a generic computer component, the processor, see, e.g., Intellectual Ventures, 2014 WL 1513273, at *3 (noting that a processor is a conventional computer component); Joao Bock, 2014 WL 7149400, at *7 (finding that a processing device was a generic computer component), to perform the conventional operation of receiving data, see, e.g., buySAFE, 765 F.3d at 1355 (finding that "receiv[ing] and send[ing] the information over a network—with no further specification—is not even arguably inventive"). Therefore, individually, the first element in Claim 1 is not transformative. Likewise, element 2 simply recites a generic computer component, a display device, see DietGoal, 2014 WL 3582914, at *15 (noting that a "user interface, database, or visual display" are generic computer components), that, under Alice, is insufficient to render such element transformative, see 134 S. Ct. at 2358. Finally, element 3 is not transformative because it only recites one generic computer component, the processor, using data to cause another generic

component, the display device, to perform the conventional computer function of displaying information. See Loyalty Conversion, 2014 WL 43648484, at *9 (finding that "displaying information" was one of the "basic functions of a generic computer"); DietGoal, 2014 WL 3582914, at *13 (citing Accenture, 728 F.3d at 1338, 1344-45) (holding that manipulating data, making computations from stored data, and "displaying the results on a visual display" were conventional computer tasks). Accordingly, the elements in Claim 1, considered individually, do not transform such claim into the patent-eligible application of the abstract idea to which such claim is directed.

The Court also finds that the elements of Claim 1 fail to transform such claim when considered as an ordered combination because they merely recite the use of generic computer components configured to perform routine, conventional computer functions. Using a processor to receive information and control a display device to visually display information is not an "additional feature" in Claim 1 that "ensure[s] that the claim is more than a drafting effort designed to monopolize the abstract idea" of electronically displaying information, as applied in the particular technological environment of conducting a locate operation. See Alice, 134 S. Ct. at 2357 (alterations, citation, and internal quotation marks omitted). Claim 1 merely recites using conventional computer components,

performed in a conventional way, to implement the abstract idea of electronically displaying information, limited to the particular field of conducting a locate operation through the sort of information that is displayed. However, the specificity of the information that the processor receives and the display device displays does not alter the Court's conclusion that, as a whole, the elements in Claim 1 are not transformative of the abstract idea they embrace because "limiting the use of an abstract idea to a particular technological environment" is not enough to confer patent eligibility. Id. at 2358 (internal quotation marks omitted) (citing Bilski, 561 U.S. at 610-11). Therefore, the Court finds that Defendants have shown, by clear and convincing evidence, that Claim 1 of the '001 patent is invalid because it does not claim patent-eligible subject matter under 35 U.S.C. § 101. The Court will **GRANT** Defendants' motion with respect to the '001 patent.[17]

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[17] As noted above, the Supreme Court has indicated that the machine-or-transformation test remains a "useful and important clue . . . for determining whether some claimed inventions are processes under § 101." Bilski, 561 U.S. at 604. To satisfy such test, the invention must be "tied to a particular machine or apparatus" or "transform a particular article into a different state or thing." Id. at 602 (citation and internal quotation marks omitted). In their briefs, the parties presented no argument with respect to the machine-or-transformation test. The Court has employed the methodology that the Supreme Court applied in Alice to determine whether the asserted claims of the patents-in-suit claim patent-eligible subject matter under 35 U.S.C. § 101. However, applying the machine-or-transformation test would not alter the Court's conclusion. The asserted claims fail under the machine prong of such test because they "are not tied to any particular novel machine or apparatus," only

Considering the elements of the asserted claims in the patents-in-suit, both individually and as an ordered combination, under Alice, Defendants have shown, by clear and convincing evidence, that such claims do not claim patent-eligible subject matter under 35 U.S.C. § 101. To the extent the asserted claims of the patents-in-suit are invalid, it appears certain that Plaintiff cannot prove any set of facts in support of its patent infringement claims entitling it to relief. Therefore, pursuant to Rule 12(c), the Court will direct the Clerk to enter judgment in favor of Defendants.

IV. CONCLUSION

For the reasons stated above, the Court **GRANTS** S&N's Motion for Judgment on the Pleadings Based on Failure to Claim Patent-Eligible Subject Matter, ECF No. 197. In light of such decision, the Court **DENIES AS MOOT** Plaintiff's Motion for Summary Judgment on Anticipation and Certain Obviousness Arguments, ECF No. 213, and Defendants' Motion for Summary Judgment, ECF No. 216.

The Clerk is **REQUESTED** to enter judgment in Defendants' favor pursuant to Rule 58 of the Federal Rules of Civil Procedure.

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generic computer components configured to implement abstract ideas. See Ultramercial, 2014 WL 5904302, at *6. The asserted claims also fail under the transformation prong of the machine-or-transformation test because they do not transform any "particular article into a different state or thing." See Bilski, 561 U.S. at 604.

The Clerk is **REQUESTED** to send a copy of this Opinion and Order to all counsel of record.

IT IS SO ORDERED.

/s/ MSD

Mark S. Davis
United States District Judge

Norfolk, Virginia
January 21, 2015